R.S.

HINDUSTAN YEAR BOOK

1952

Ed
~~807~~
~~895~~

~~Ed~~
~~576~~

~~7409~~

9.12

INDIAN PARLIAMENT
AND
STATE ASSEMBLIES & COUNCILS.

(SUPPLEMENT TO HINDUSTAN YEAR BOOK 1952)

This book will be published after the elections are over and results are out and new ministries take their offices in the Centre and the States.

The Book will contain—(1) Names of all successful candidates. (2) Names of all ministers in the Centre and the States with their portfolios. (3) Names of New Governors. (4) Party positions. (5) Analyses, indexes and comparative tables. (6) Names of all political parties and their leaders etc.

For Purchaser of Hindustan Year-Book, Re. 1.

For Others, Rs. 1/4/-

ORDER FORM*

Please send me per v.p.p. a copy of *Indian Parliament and State Assemblies and Councils* (Supplement to Hindustan Year-Book 1952). I am a purchaser of Hindustan Year-Book.

Name..

Address..

S.C.E.R.T., West Bengal
Library
Calcutta

---

* *Year-Book Purchasers must send this order form to get concession price.*

S.C.E.R.T. West Bengal
Date.........
Acc. No. ~~5624~~
5724

Lily Biscuits in all varieties are tasty
and made of choicest ingredients.
It provides you with best
tiffin and at the same
time it is economical.

THIN
NICE
MARRY
CREAM-CRACKER
AND
MALTED

Lily Biscuit Co. Ltd.

3, Ramkanta Sen Lane Ultadanga
CALCUTTA—4

Part and Parcel of our Name.........................

PAPER

BHOLANATH DUTT

(PAPER MERCHANTS) LTD.

34A, BRABOURNE ROAD, CALCUTTA-1

P. O. BOX NO. 2427
PHONE: BANK 1795

TELEGRAM "PAPERPRINT"

Importers & Stockists :

Paper, Board, Stationery, Ptg. Ink &
Press Requirements.

To-day's World

Rotates on the

AXIS OF PAPER

RAGHUNATH DUTT
& SONS, LTD.

IMPORTERS & EXPORTERS :

Paper, Board, Stationery, Ptg. Ink etc.

"RAGHUNATH BUILDINGS", 32A, BRABOURNE ROAD
CALCUTTA-1

Phone—Bank 1795

Gram—Notepaper

HINDUSTAN YEAR-BOOK
& WHO'S WHO
1952

Ed
~~8710~~
576

BY

S. C. SARKAR

Author, Book of General Knowledge, General Knowledge Geography, Notable Indian Trials, etc.

Twentieth Year of Issue

M. C. SARKAR & SONS LTD.
14, BANKIM CHATTERJEE STREET,
CALCUTTA—12

Paper Cover 3/12
Cloth bound 4/12

Copyright is strictly reserved by the Author

Published by S. Sarkar of M. C. Sarkar & Sons Ltd., 14, Bankim Chatterjee Street, Calcutta—12 and printed by B. K. Sen at Modern India Press, 7, Wellington Square, Calcutta—13.

FOREWORD

The 1952 Hindustan Year-Book is the twentieth anniversary edition. It is our greatest pleasure to state that within these 20 years, we have been lifting our aims and widening the scope of the book with each succeeding edition. We have improved all our regular sections and have added new features and have considerably expanded information on all subjects.

We convey our best thanks to the State Governments and Central Government and its Departments for supplying us with essential information whenever asked for.

Once again many readers' suggestions have been incorporated this year. We appreciate their help and shall welcome more suggestions.

Paper and production costs have almost doubled in the year, yet we have been able to give a larger book at no extra cost to the reader. This is made possible by the greater demand for the book whose sales are rapidly increasing every year.

1st Feb., 1952.
Calcutta.

S. C. Sarkar.

E. I. P. W. Products

Stand for

PURITY RELIABILITY

And

MAXIMUM POTENCY

◆

We Manufacture :

Specialities, Sterilised Chemical Solutions,
Colloid products, Vaccines, Phages
and Pharmaceutical Drugs—
in our own Laboratory and
under the Supervision of
Expert Chemist :

◆

EAST INDIA

PHARMACEUTICAL WORKS LTD.

71, Russa Road : : Tollygunge
CALCUTTA

CONTENTS

PAGE

Calendar 1
Astronomical Data 7
Anthropological Information 10
Geographical Information 12
General Information 21
World Population 38
World Gazetteer 40
Political Information 50
India at a Glance 71
Indian Information 82
Constitution of India 98
Our Flags, Emblems, etc. 105
Banks in India 107
Transport & Communications 121
Indian Ports 148

Insist on

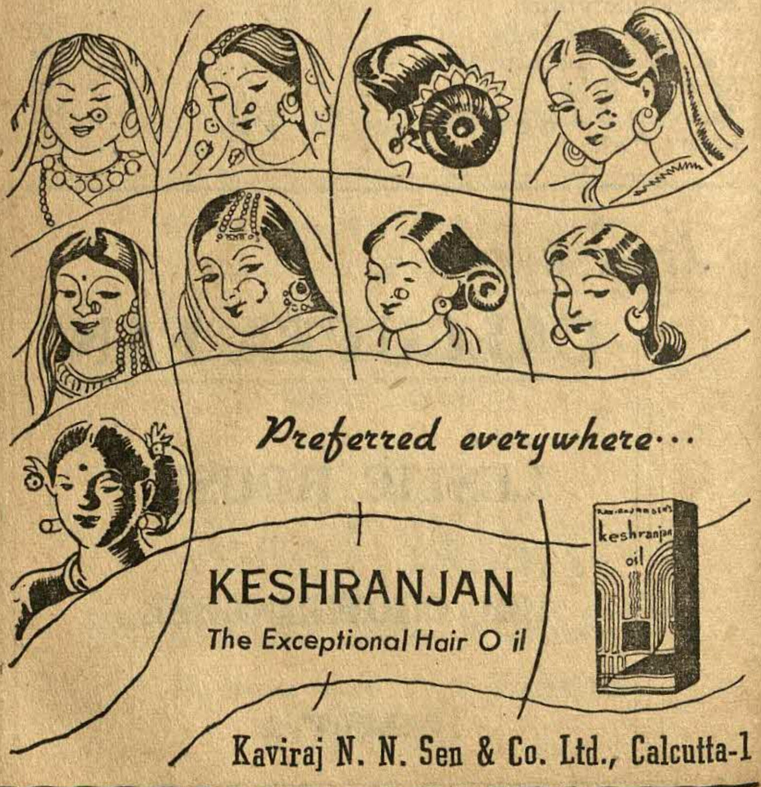
CALCUTTA FAN

LESLIE HOUSE

19B, CHOWRINGHEE

CALCUTTA

Indian Agriculture 158
Livestock in India 166
Forest in India 170
Indian States 177
Fishery in India 186
Indian Irrigation 190
Labour in India 206
India's Water-power & Electricity 219
Public Health & Hygiene 226
Prohibition in India 235
Scientific & Industrial Progress in India 236
Indian Minerals 242



Ba/807(+)

National Defence 250
Cinema in India 259
Indian Finance 266
Bullion 279
Index Number on Various Subjects 283
Broadcasting in India 286
Indian Materiology 291
Food Problems in India 292
United Nations 298
Sports—India and World 306
Indian Industry 320
India's Tariff Policy 346
Indian Press 354
Indian Education 363
Indian National Congress 378
Indian Census 381
Development Plans & Projects in India 402
India's Foreign Policy 421

SWTS

TRAVEL By AIR or SEA

to any part of the World and
make your Bookings through

Star World Travel Service

TRAVEL AGENTS

33, NETAJI SUBHAS ROAD, CALCUTTA-1.

PHONE : BANK 5389

Swts's free Service Includes :

* Purchase of Tickets * Passports & Visas
* Medical Certificates * Insurances
* Travellers Cheques & Advice on Currency Regulations
* Hotel Reservations * Charter Planes & * Conducted Tours.

Abolition of Zemindary & Tenancy Legislations .. 423
India's Foreign Relations 424
States in Indian Union 441
States Bordering India 465
Pakistan 469
Indian Politics, 1951 483
Indo-Pakistani Relations 496
International Affairs 508
Directory Section 534
State Ministers 546
National Income 548
Who's Who in India 549
General Election Supplement 577

THE INDIA ELECTRIC WORKS LTD.

DIAMOND HARBOUR ROAD, CALCUTTA—8

Sales City Office :—
3 1, DHARAMTOLLA STREET, CALCUTTA—13
Phone : Centra 12102

Branches At :
MADRAS, BOMBAY, DELHI, CALCUTTA, NAGPUR, PATNA.

GENERAL INDEX

A

Astronomical Data .. 7
Anthopological Information 10
Architectural & Historical Landmarks 95
Aviation in India 139
  Air Statistics 145
  Indian Air Services .. 145
  National Air Markings .. 146
  Foreign Air lines .. 147
  Indian External Services 147
  Some Important Dates .. 147
Agriculture, Indian .. 158
Army, Indian 253
Air Force, Indian 254
Academy Awards 265
A. I. R. 286
Abolition of Zemindary & Tenancy Legislations .. 423
Ambassadors, Indian .. 537

B

Banks in India— 107
  Reserve Bank of India .. 108
  Imperial Bank of India 110
  Exchange Banks .. 111
  Joint Stock Banks .. 112
  Co-operative Banks .. 113
  Indigenous Banks .. 114
  Land Mortgage Banks .. 115
  Banking Companies Act 115
Banking Statistics 117
Birth Rates 233
Births & Deaths in India .. 235
Bauxite 248
Base Metals 249
Best British Films .. 266
Budget, Central Govt. .. 269
Budgetary position of States 275

CITIZENS OF INDIA

MUTUAL INSURANCE CO., LIMITED

(POLICY HOLDER'S OWN CONCERN)

Chairman :

Rai Bahadur Rameswar Nathany

(*Dudhwala*)

General Manager :

Sri P. S. Karain

Secretary :

H. Chakravarti B. L.

Ast. Manager :

P. Chakravarti B. A.

Chief Operating Office :

117A, CHITTARANJAN AVENUE, CALCUTTA

S. C. SARKAR'S

SUMMARY OF THE CONSTITUTION OF INDIA

It contains the complete summary of the New Indian Constitution with useful notes and other appendices.

3RD EDITION 1951 Re. 1/-

BOOK OF GENERAL KNOWLEDGE

By far the best and up-to-date book on the subject—eminently suitable for all examinations on General Knowledge; New edition with numerous additions and many up-to-date information.

16th Revised edition Rs. 2/12/-

GENERAL KNOWLEDGE GEOGRAPHY

Only book of its kind in India—not only eminently suitable to students for all competitive examinations but also to geography students of schools and college standard.

2ND EDITION Rs. 2/-

NOTABLE INDIAN TRIALS

The book contains the following trials—(1) Alipur Bomb Case, (2) Trial of Nirmal Kanta Ray, (3) Pakur Murder Case, (4) Bawla Murder Case, (5) Agra Double Murder, (6) Meerut Conspiracy Case, (7) Patrika Contempt of Court Case, (8) Lahore Conspiracy Case, (9) Kakori Conspiracy Case, (10) Sati Case, (11) Story of a Raja's lust, (12) I. N. A. Trial, (13) Bhawal Sannyasi Case etc.

2ND EDITION 1948 Rs. 4/8.

M. C. SARKAR & SONS LTD.

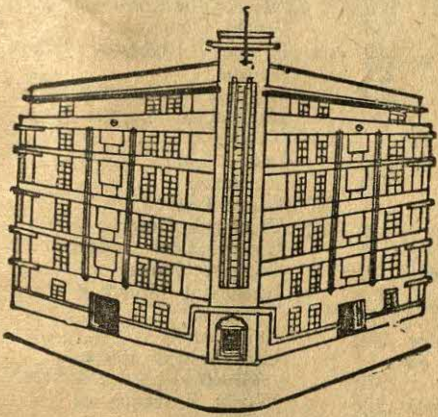
14, Bankim Chatterjee Street, Calcutta—12.

Bullion 279
  Price of Gold 280
  Production of gold in India 280
  Production of silver in India 280
  Export & Import of Gold & Silver 280
  Rupees coined since 1835 281
Broadcasting in India .. 286
  No. of Receiver Licences 289
  News Services .. 290
  Revenue from Custom Duty 290
  Radio Receiver Imported 290
  Important dates of Broadcasting in India .. 290

C

Calendar 1
Constitution of India— .. 98
  Preamble 98
  Territory & Extent .. 98

Constitution of India
  Citizenship 98
  Fundamental Rights .. 99
  Directive Principles of State policy 99
  Union Executive .. 100
  Union Judiciary .. 101
  Public Services .. 102
  Attorney-General .. 102
  Comptoller & Auditor General 102
  States 102
  Distribution of Powers .. 104
  Trade, Commerce etc. .. 104
  Finance, Property, Contract 104
  Elections 104
  Special Provisions for Certain Classes .. 105
  Languages 105
Co-operative Banks .. 113
Cattle in India 169
Canals and Dams of India .. 194
Coal 245



Head Office Building
At
64, Ganesh Chandra Avenue, Calcutta
Under Construction.

INSURANCE OF INDIA LIMITED

Head Office :
4, CLIVE GHAT STREET CALCUTTA

Chromate 248
Cement 248
Copper 248
Congress, Indian National .. 378
Census, Indian, 1951 .. 381
Cinema in India 259
  Film Enquiry Report .. 259
  Censorship of Films .. 261
  Film Statistics .. 262
  Imports of Cinematograph Films 263
  Film Facts 264
  Leading Indian Producers, Studios, Distributors, Foreign Producers .. 265
  Academy Awards .. 265
  Best British Film Awards 266
Central Govt. Budget .. 267
Central Govt. Debts .. 269
Capital Budget of Central Government 269
Central Government Loans .. 271
Control of Capital Issues .. 281
Circulation of Notes .. 282

D

Dairy Farming 175
Death Rates 233
Defence, National 250
  Indian Army 253
  Indian Navy 254
  Indian Air Force .. 256
Diplomatic Representatives in India 543
Directory Section 534

E

Exchange Banks 111
Economic & Social Council 300
Education, Indian .. 363
  Museums in India .. 372
  Activities of Ed. Ministry 369
  Prov. Expenditure on Education 370
  States Education Budgets 371
  Indian Universities .. 372
  Educational Institutions 373
  Learned Societies .. 377

F

Festival 4
Food Crops 162
Forest in India 170
Farming, Dairy 175
Fishery in India 186
Factories in India 219
Film Enquiry Report .. 259
Film Statistics 262
Film Facts 264
Finance, Indian 266
Food Problems in India .. 292
  General Position .. 292
  Food Position in 1950 .. 293
  Food Imports .. 295
  Procurement & Rationing 295
  Overall Requirements .. 295
  Programme of integrated Production .. 296
  Land Reclamation .. 297
  Short Term Expedients 297
Food & Agricultural Organization 302
Foreign Policy, India's .. 421
Foreign Relations, India's .. 424

G

Geographical Information .. 12
  Area of the Continents .. 12
  World Dimensions .. 12
  Principal Rivers .. 12
  Oceans 13
  Highest Mountain Peaks 13
  Highest and Lowest Altitudes 13
  Large Lakes .. 14
  Volcanoes 14
  Large Islands .. 14
  Principal Deserts .. 14
  Geographical Surnames 15
  Longest Tunnels .. 15
  Important Mountain Passes 15
  Ship Canals 16
  Geographical Record-Breakers 16
  World Extremes of Climate 17
  Famous Waterfalls .. 17
  Great Earthquakes .. 18
  Polar Records .. 18
  Natural Wonders of the World 19
  Man-made Wonders .. 19

General Information .. 21
Longest Railway Station Platforms 21
Famous Bridges .. 22
Notable Telescopes .. 22
Biggest Vessels .. 23
Seven Wonders of the World 23
Largest Bells .. 23
High Buildings & Towers 24
World Famous Dams .. 24
Biggest, Largest, Greatest, Longest 24
Mechanical Inventions & Discoveries .. 26
Chemical Inventions & Discoveries .. 27
Discoveries & Inventions in Electricity .. 28
Discoveries in Medicine & Physiology .. 28
Discoveries in Physics .. 29
Nobel Prizes 29

General Information
Birth-stones 32
Indian Stones against Planetary Actions .. 33
Famous Diamonds .. 33
Thermometers .. 33
Length of Life .. 33
Animal & Bird Records 34
Speed of Birds .. 34
Longivity of Trees .. 34
Big Parks 34
Gestations & Incubation Periods 34
Comparative Speeds .. 35
Big World Fairs .. 35
Highest and Greatest Depths 35
National & State Flowers 35
Railway Records .. 36
Railway Gauges .. 36
Size of Printing Papers 36
Highest Railway Bridges 36
Longest Railway Bridges 37

THE ASSAM REVIEW & TEA NEWS

Assam's Best Monthly Magazine dealing with the Tea Industry, also contains exclusive and attractive articles on all current subjects. This circulates throughout the Tea Areas of Northern and Southern India as well as in all Tea areas of Pakistan.

Annual Subscription Rs. 10|- **Overseas Rs. 15|-**

THE ASSAM DIRECTORY & TEA AREAS HAND-BOOK

A particularly handy up-to-date Directory of Assam and the Tea Areas of Northern and Southern India, also the Tea Areas of Pakistan.

Price per copy Rs. 7|8|- : : Postage Extra

available from:—

THE ASSAM REVIEW PUBLISHING CO.,
29 Waterloo Street, Calcutta 1
Phone: West 1485 Gram: "Sylasscar"

General Information
  Freezing, Fusing & Boiling Points 37
  Some World Leaders .. 37
Gazetteer of the World .. 39
Gold 246, 280
Gypsum 249
General Assembly U.N. .. 299
General Elections 577

H

Holidays 4
Hill Stations 90
Hydro-Electric and Irrigation Projects in India .. 197
High Commissioners .. 540

I

India at a Glance .. 71
  Physical Division .. 72
  Climate and Rainfall .. 72
  Soil of India .. 73
  Himalayan Frontier .. 73
  Coast Line 74
  Frontiers 74
  Ports 75
  Population 75
  Indian Races .. 75
  Agriculture 77
  Animals 77
  Forests 78
Indian Facts in a Nutshell .. 78
Indian Information .. 82
  Indian States .. 82
  Indian Bridges .. 82
  Indian Flags .. 83
  Distances by Rail .. 83
  Attempts on Everest .. 83
  Conquest of Himalayan Peaks 83
  Changed names of Indian Places 84
  Indian Fellows of Royal Society 84
  Indians in British Parliament 84
  Indian Privy Councellors 84
  Indian Peer of the British Realm 84
  Indian Winners of Victoria Cross .. 84
  Winners of Param Vir Chakra 84

Indian Information
  Presidents Legislative Assembly 84
  Speaker, Constituent Assembly, India .. 84
  Speaker, Indian Parliament 86
  Presidents, Indian National Congress .. 86
  Indian Political Parties 88
  Firsts in India .. 89
  Firsts among Indians .. 89
  Hill Stations .. 90
  Places of Interest in India 92
  Architectural & Historical Landmarks .. 95
Imperial Bank of India .. 110
Indigenous Banks .. 114
Indian Ports 148
India's First General Election 577
Indian Shippping .. 154
Indian Agriculture .. 158
  Food Crops .. 162
  Plantation Crops .. 163
  Fibres 164
  Oilseeds 164
  Agricultural Production in India 165
  Industrial & Agricultural Production of India .. 166
Indian Livestock .. 166
Indian Forest 170
Indian States 177
  Privy Purse amounts .. 181
Indian Fishery 186
Indian Irrigation .. 190
  Canals and Dams of India 194
  Principal Multipurpose Projects .. 195
  Irrigation & Power Projects (Map) .. 196
  Hydro-Electric and Irrigation Projects in India 197
Indian Labour 206
India's Water Power & Electricity 219
Infant Mortality .. 234
Indian Minerals 242
Ilmenite 248
Indian Army, Navy, Air Force 253
Indian Finance 266
  Central Govt. Budget .. 267
  Public Debts .. 267

Indian Finance
  Revenue & Expenditure, of Central Govt. .. 269
  Central Govt. Debts .. 269
  Capital Budget of Central Govt. 269
  Treasury Bills .. 270
  Central Govt. Loans .. 271
  Interest-Bearing Obligations 272
  Interest-yielding Assets 272
  Sterling Debt .. 273
  Finance of Part 'A' & 'B' States 274
  Income-Tax 278
Index Number 283
  Index Number of Security Prices .. 283
  Index Number of Industrial Production .. 284
  Index Number of Industrial Shares .. 284
Index Number
  Movement of Prices since Devaluation .. 285
  Index Number of Wholesale Prices .. 285
Indian Meteorology .. 291
  Average Rainfall in India 291
  Normal Rainfall in India 292
  Maximum & Minimum Temperatures .. 292
Industrial disputes in India .. 219
Industrial Production since 1938 343
International Court of Justice 301
I.L.O. 302
I.C.O.A. 303
International Banks (BANK) 303
International Monetary Fund (FUND) 303
International Tele-Communication Union 305
International Refugee Organisation 305

Sir J. N. SARKAR'S

Rs. A.
Fall of Mughal Empire, Vol. I, II, IV each .. 10 0
Sivaji & His Times 10 0
Short History of Aurangzeb 5 0
House of Sivaji 5 0
Chaitanya and his Pilgrimages 2 0
Anecdotes of Aurangzeb 2 0
India Through the Ages 2 8
Studies in Aurangjeb's Reign 2 8

H. N. BANERJEE'S

India's New Constitution (with Articles) 6 0
India's New Constitution 3 0
Q. & A. on Indian Constitution 3 8

M. C. SARKAR & SONS LTD.
14, Bankim Chatterjee Street, Calcutta—12.

Inter-Government Maritime Organization 305
International Trade Organization 305
Indian Industry 320
  Cotton 326
  Jute 327
  Coal 328
  Sugar 329
  Paper & Paper Boards .. 329
  Leather & Tanning .. 330
  Hosiery 331
  Petroleum 331
  Silk 331
  Woollen Goods .. 332
  Cement 332
  Rubber 333
  Match 333
  Glass 334
  Plywood 335
  Soap 335
  Oil Milling 335
  Tea 335
  Tobacco 336
  Automobile Industry .. 337
  Battery 337
  Paint & Varnish .. 338
  Sports Goods .. 338
  Non-Ferrous Metals .. 339
  Drugs & Pharmaceutical Industries 341
  Chemical Industries .. 342
  Industrial Production in India 343
Indian National Congress .. 378
India's Foreign Policy .. 421
India's Foreign Relations .. 424
Indian Politics 483
Indo-Pakistani Relations .. 496
International Affairs .. 508

J

Joint Stock Banks, India .. 112

K

Kyanite 248

L

Livestock in India .. 166
Labour in India 206
  Labour Laws .. 207
  Labour Administration .. 213
  Industrial Peace .. 215

Labour in India
  Trade Unions in India .. 215
  India & International Labour Organisation .. 217
  Labour & the Constitution 217
Laboratories, Medical Researches etc. .. 213
Limestone 248
Lead ores 249
Leading Indian Producers, Studios, Distributors, Foreign Producers .. 265
Land Reclamation .. 297

M

Multi-purpose Projects .. 195
Medical Colleges .. 233
Marriage Rates .. 234
Minerals, Indian .. 242
  Description of Minerals 245
  Coal 245
  Manganese 246
  Gold 246
  Mica 247
  Petroleum 247
  Iron 247
  Salt 247
  Ilmenite 248
  Monazite 248
  Zircon 248
  Chromite 248
  Magnesite 248
  Buxite 248
  Cement 248
  Kyanite 248
  Copper 248
  Limestone 248
  Gypsum 249
  Sulphur 249
  Steatite 249
  Precious Stones .. 249
  Base Metals 249
  Lead Ores 249
  Miscellaneous Minerals 249
  Mineral Production of India 249
  Meteorology, Indian .. 291
Ministers, State 546

N

Nobel Prizes 29
National Income 548

- National Defence .. 250
  - Army .. 253
  - Navy .. 254
  - Air Force .. 256
  - Officers Recruitment & Training .. 257

O

- Our Flags .. 105
  - History .. 105
  - The Flag of India .. 106
  - Standard National Flag 106
  - State Emblem .. 107
  - National Song .. 107
- Oilseeds .. 164
- Outstanding Features in Electricity Supply Industry .. 225
- Officers Recruitment & Training .. 257
- Organs of United Nations .. 299

P

- Population, World .. 38
  - Arab Population .. 38
  - U. S. Population .. 38
  - Largest Populated Cities 38
  - Marriage Rates .. 38
  - High Population Densities 38
  - World Population .. 38
  - Population of Leading Countries .. 39
  - Crude Birth & Death Rates .. 39
- Political Informations .. 50
  - Rulers or Heads of Governments of the World 50
  - American Presidents .. 51
  - British Prime Ministers 51
  - Political Assassinations 52
  - Important Abdications in History .. 53
  - Independence or National Days .. 53
  - National Anthems .. 54
  - Flags of Countries .. 54
  - Names of the World's Parliaments .. 54
  - 'Blue' Books .. 55
  - Political Parties & Groups 55
  - Political Terms .. 56
  - Plans, Policies, Treaties etc. .. 65
- Political Parties, Indian .. 88
- Places of Interest in India .. 92
- Ports, Indian .. 148
  - Description of Ports .. 150
- Plantation Crops .. 163
- Public Health & Hygiene .. 226
  - Laboratories, Medical Researches etc. .. 231
  - Medical Colleges .. 233
  - Crude Birth Rates .. 233
  - Crude Death Rates .. 233
  - Infant Mortality .. 234
  - Marriage Rates .. 234
  - Tuberculosis Death .. 234
  - Birth Rates, death rates and infant mortality in India .. 234
  - Births & Deaths in India 235
  - Public Health Statistics 235
- Prohibition in India .. 235
- Petroleum .. 247
- Precious Stones .. 249
- Public Debt .. 267
- Procurement Rationing .. 295
- Press, Indian .. 354
  - Important Indian Newspapers .. 358
  - Information Bureaus .. 362
  - Indian News Agencies .. 362

R

- Reserve Bank of India .. 107
- Railways .. 121
  - Railway Organisations .. 126
  - Railway Route Mileage 128
  - Railway Depreciation Fund .. 128
  - Revenue Reserve Fund 128
  - Railway Development Fund .. 129
  - Comparative Figures of Railways .. 129
  - Railway Finance .. 129
  - Railway Facts .. 131
- Roads in India .. 133
- Revenue & Expenditure, Central Government .. 269
- Radio, No. of Licence .. 289
- Rainfall in India .. 291

S

- Solar System .. 7
- States, Indian .. 177

- Scientific & Industrial Progress in India 236
- Salt 247
- Sulphur 249
- Steatite 249
- Sterling Debts 273
- Silver 280
- Small Coins 282
- Security Council 300
- Specialised Agencies of U.N. 302
- Sports—India & World .. 306
  - Indian Cricket .. 306
  - Football 308
  - Hockey 309
  - Some All-India Sports Records 310
  - First Asiad 311
  - Cricket 312
  - World Track & Field Records 313
  - World's Summing Records 314
  - Womens' World Track, Field & Swimming Records 314
  - World Chess Champions 315
  - Boxing Champions .. 315
  - World Table Tennis .. 316
  - World Football Cup .. 316
  - Olympic Records .. 316
  - Some Notable Records .. 317
  - Aviation Records .. 318
- States in Indian Union .. 441
  - Assam 441
  - West Bengal .. 442
  - Bihar 443
  - Bombay 444
  - Madhya Pradesh .. 445
  - Madras 446
  - Orissa 448
  - Punjab 450
  - Uttar Pradesh .. 451
  - Madhya Bharat .. 452
  - Rajasthan 453
  - Saurashtra .. 454
  - Pepsu 455
  - Hyderabad .. 456
  - Jammu & Kashmir .. 457
  - Mysore 458
  - Travancore-Cochin .. 459
  - Delhi 459
  - Ajmer 460
  - Coorg 461
- *States in Indian Union*
  - Bhopal 461
  - Bilaspur 462
  - Himachal Pradesh .. 462
  - Kutch 462
  - Manipur 463
  - Tripura 463
  - Vindhya Pradesh .. 464
  - Andaman & Nicober Ils. 464
- States Bordering India .. 465
  - Sikkim 465
  - Bhutan 465
  - Nepal 467
  - Tibet 468
  - Pakistan 469
- Supreme Court, Judges of the 536

T

- Transport & Communications 121
  - Railways 121
  - Roads in India .. 133
  - Waterways 138
  - Aviation in India .. 139
- Trade Unions in India .. 215
- Trade Representatives, Indian 541
- Treasury Bills 270
- Temperature, Maximum & Minimum 292
- Trusteeship Council .. 301
- Tariff Policy, India's .. 346
- Trade & Commerce, Indian .. 392
  - Balance of Trade .. 398
  - Principal Article of Export 398
  - Direction of Trade .. 401
  - Principal Articles imported 400
  - Development Plans & Projects in India .. 402
  - Development Projects .. 409
  - Five-year Plan .. 403

U

- United Nations 298
  - Organs of United Nations 299
  - General Assembly .. 299
  - Security Council .. 300
  - Economic & Social Council 300
  - Trusteeship Council .. 301

United Nations
- International Court of Justice 301
- Specialised Agencies of U.N. 302
- International Labour Organisation 302
- Food & Agriculture Organisation 302
- UNESCO 303
- International Civil Aviation 303
- International Bank .. 303
- International Monetary Fund 303
- World Health Organisation 304
- Universal Postal Union 304
- International Telecommunication Union .. 305
- International Refugee Organisation 305
- World Meteorological Organisation .. 305

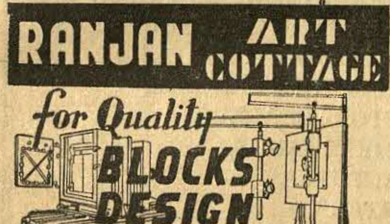
United Nations
- Inter-Govt. Maritime Organisation .. 305
- International Trade Organisation 305

W

Wonders of the World .. 19
World Population .. 38
World Gazetteer .. 39
Waterways 138
Workman's Compensation in India 219
Water-Power & Electricity, India's 219
World Meteriological Organisation 305
World Health Organisation 304
Who's Who in India .. 549

Z

Zircon 248



KIRIT ADVERTISING AGENCY

★

72, Hindusthan Park
Ballyganj, Calcutta-29

CLIFFORD ROTARY TRACTOR

6 H. P. Tractor—Ploughing deep upto nine inches—One Bigha in one hour, Powerine Engine.

GOVERNMENT CONTRACTORS, MARINE, COLLIERY, TEA
GARDEN, WORKSHOP, RAILWAY STORES SUPPLIERS,
ELECTRIC MOTORS & GENERATORS, CRUDE,
KEROSENE, DIESEL OIL ENGINE,
PUMPS, TRACTOR DEALERS,
GENERAL MERCHANTS,
MANUFACTURERS,
IMPORTERS &
EXPORTERS,
ETC., ETC.

SOLOMON & CO.,

Sole Prop : **NRIPEN BHATTACHARJEE**

29, STRAND ROAD. (Mohta House) CALCUTTA—1

TELEGRAM: "AGRASTONS" PHONE: BANK 4497

READY MARCH

S. C. SARKAR'S

INDIAN FACTS & FIGURES

1952 : Rs. 1-8

CALCUTTA GUIDE & DIRECTORY

5th Ed. 1952 Rs. 1-8

LATEST GOVERNMENT PUBLICATIONS

	Rs.	as.	p.
Hand Book of India	2	8	0
Chinnava Keshava Temple	1	8	0
Buddhist Shrines in India	3	0	0
Indian Art Through the Ages	10	0	0
About India	1	8	0
Our Flag	0	8	0
Our National Song	0	8	0
Our Roads	2	8	0
5000 Years of Indian Architecture ..	2	0	0

M. C. SARKAR & SONS LTD.

Agents for the Sale of Government of India Publications

14, Bankim Chatterjee Street, Calcutta-12.

Tribute to Beauty

Our quality toileteries are humble tribute to Beauty.

Calchemico's

MARGO SOAP

NEEM TOOTH PASTE

BHRINGOL MAHABHRINGARAJ HAIR OIL

LABONNY SNOW AND CREAM

KANTA KERCHIEF PERFUME

THE CALCUTTA CHEMICAL CO., LD.
CALCUTTA-29.

HINDUSTAN YEAR-BOOK

THE CALENDAR

Indian Calendar—The *Samvat* era is most widely used specially in northern India, Rajasthan, Guzrat and is believed to have been established by Vikramaditya, the king of Ujjain to commemorate his victory over Saka kings. But there is dispute over the identity of Vikramaditya as there are so many kings bearing this name. It commenced on February 23, 57 B.C. Samvat is a luni-solar year.

The *Saka* or Sakabda era which is used in some parts of South India is said to date from the Saka king, Salibahana and dates from 3rd March, 78 A.D.

Bengali Year was originally a reckoning for agricultural and revenue purposes instituted at the time of Emperor Akbar. In A.D. 1555-6 corresponding to Hijri 962-3, solar computation was introduced to the muslim era Hijri which became the *Fasli* or harvest era of northern India and was adopted as the current official era in Bengal.

Other Eras—the *Kali era* is computed from 3601 B.C., the *Buddha era* from 543 B.C. and *Chaitanya era* from 1485 A.D.

Mahomedan Calendar—The Mahomedan era is based on *Hijra* or flight of Mahomed from Mecca to Medina. The first day of the era is not the actual date of flight but 16th July, 622 A.D. *Hijra* is a purely lunar year consisting of 12 months containing in alternate sequence 30 or 29 days, with the intercalation of one day at the end of the 12th month at stated intervals in each cycle of 30 years, the object of the intercalation being to reconcile the date of the first of month with the date of the actual new moon. The mean length of *Hijra* Year is 354 days 48 minutes and the period of mean lunation is 29 days 12 hours 44 minutes. In each cycle of 30 years 19 are common and contain 354 days and 11 are intercalarly (356 days), the latter being called *Kabishah*.

Modern Calendar—The modern calendar is based on the one devised by Julius Cæsar. He fixed the average length of the year at 365¼ days as measured by the sun. Each year has 365 days with every fourth year as 'leap year' of 366 days. This so-called Julian calendar was modified by Pope Gregory XIII to correct an error of a few minutes in each year.

Jewish Calendar—is luni-solar; that is to say, the year is solar and month are lunar. In a cycle of 19 years the 1st, 2nd, 4th, 5th, 7th, 9th, 10th, 12th, 13th, 15th, 16th and 18th year have 12 months and the remaining years 13 months of 29 or 30 days each. The length of the ordinary year may be 353, 354 or 355 days and that of the leap year 383, 384 or 385 days; thus the mean length of the year over a 19-year cycle is just over 365 days. The years are reckoned from the creation of the world, the date of which is taken to be 3760 B.C. Thus the year A.D. 1938 is A.M. (*Anna Mundi*) 5698-99. The day begins at sunset for the purpose of observing the Sabbath and the various feasts and fasts. The time is 2 hours 21 minutes in advance of Greenwich time, being that of the meridian of Jerusalam.

Parsi Calendar—is generally supposed to relate to the arrival of Parsis in India in 626 A.D.

Buddhist Calendar—It is reckoned from the death of Buddha in 543 B.C. (the actual date being 487 B.C.). The Buddhist year begins from Vaisakhi Purnima. Buddha was born on the Baisakhi full moon day, he took his seat under Bodhi tree at Gaya on full moon day to attain wisdom. It was on the full moon day again that he left the world.

Hindu Calendar—Hindus have employed luni-solar cycles made by the combination of solar years and lunar years so treated as to keep the beginning of the lunar year near that of the solar year. In some parts solar years are used while in other parts lunar is followed:

The solar year is divided into 12 months in accordance with the successive *Sankarantis* or entrances of the Sun into the (sideral) signs of zodiac. The names of the signs are as follows:—

Mesha, the ram (Aries).
Vrishabha, the bull (Taurus).
Mithuna, the pair (Gemini).
Karkata, the crab (Cancer).
Sinha, the lion (Leo).
Kanya, the maiden (Virgo).
Tula, the scales (Libra).
Vrischika, the scorpion (Scorpio).
Dhanus, the bow (Sagittarius).
Makara, the sea monster (Capricornus).
Kumbha, the water pot (Aquarius).
Mina, the fishes (Pisces).

But these are also known in some parts by another set of names preserving connection with lunar months—*Chaitra, Vaisakha, Jaistha, Asharha, Sravana, Bhadra, Asvina, Kartika, Margasirsa* or *Agrahayana, Pausa, Magha* and *Phalguna.*

The astronomical solar month runs from the moment of one *Sankranti* of the sun to the moment of the next *Sankranti* and as the signs of the Hindu zodiac are all of equal length, 30 degrees, while the speed of the sun varies according to the time of the year, the length of the month is variable.

The days of solar month begin with sun-rise. The days are named as follows: *Ravivara*, the day of sun (*Sunday*); *Somvara*, the day of the moon (Monday); *Mangalvara*, the day of the *Mars* (Tuesday); *Budhvara*, the day of Mercury (Wednesday); *Brihaspativara*, the day of Jupiter (Thursday); *Sukravara*, the day of Venus (Friday); *Sanivara*, the day of Saturn (Saturday).

The lunar year consists of primary 12 lunar months. It is of two principal varieties according as it begins with a certain day in the month of Chaitra or with the corresponding day in Kartika. The present names of the lunar months were derived from *nakshatras*, which are certain conspicuous stars and group of stars lying more or less along the neighbourhood of the ecliptic. The *nakshatras* are grouped in 12 sets of two or three each.

Names of months—January was named from *Janus*, god who presided over the beginning of everything, February from *Februa*, a festival of purification held in that month by the Romans. *Maritus* is the Mars, who was originally a god of agriculture, his month being the one when crops are ordinarily planted The origin of April is not known. May is named from *Maria*, the mother of Roman god Mercury. June is derived from Juno, the gooddess of women and of marriage. July was formerly called quintilius from *quintus*, the fifth, but when Julius Cæsar reformed the calendar, he changed the month's name to Julius in his own honour: Julius became July in English. August was originally called sextilis, afterwards was named August from the Emperor Augustus. Those from September to December are so called from the numbers *Septem*, 'seven' *Octo*, 'eight' *November*, 'nine' and *Decem*, 'ten'.

Year—Unit of time is marked by the revolution of the earth in its orbit round the sun. The solar year is 365 days 5 hours, 48 minutes 49·7 seconds. The *Calendar* year consists of 365 days, with one day added every fourth year except years divisible by hundred and not by four hundred. Thus making the solar year agrees with calendar year.

Time—Measurement of time is based on the time taken by the earth to rotate on its axis (*day*); by moon to revolve round the earth (*month*); and by the earth to revolve round the sun (*year*); *Day* starts at midnight and is divided into 24 hours of 60 minutes, each of 60 seconds. The hours are counted from midnight up to 12 at noon and these hours are designated A.M. and again from noon up to 12 at midnight, which hours are designated P.M. The 24-hour reckoning however ignores A.M. and P.M. and the hours are numbered 0 to 23 from midnight to midnight.

Different ways of telling time—The usual division of the day into "A.M." (ante meridian) and "P.M." (post meridian) groups of 12 hours each has given way for same purposes to the "24-hour" day in many countries. On the "24-hour" clock the hour begins with zero at midnight and run to 23; thus 1-30 P.M. is called 13-30 o'clock, and so on. This system is in general use on railway systems. Since it is simpler than the 12-hour system and makes calculation easier, astronomers and navigators use it for tables and records.

On ship board two varieties of time are used. "Greenwich time" or time corresponding to that at Greenwich, England, is kept by an accurate chronometer for use in determining the ship's position. The ship's routine is however governed by "watches" and "bells". The day is divided into six "watches", commencing at noon and each watch is divided into eight parts marked by "bells". One half an hour after a watch begins, "one bell" is struck. A half hour later, or one hour after the commencement of watch, "two bells" strike, and so on upto "eight bells", when the watch changes and the bells strike all over again from one to eight.

Astronomers usually use *sidereal time*, which is fixed by observing the transits of the stars. A *sidereal* day is the period of one rotation of the earth upon its axis. It starts at noon and contains 24 hrs. 56 minutes and 4 seconds of mean solar time. A *sidereal year* contains 366½ sidereal days,

Local Time—when the system of local time is used, it is 12 o'clock (noon) at any region where sun is at its highest point in the sky, and shadows are cast in a line extending north and south.

Standard Time—is the system of time established by common usage or legislative action in any part of the world. Standard time is the local time of standard meridian, but used over an entire time zone.

Daylight Saving Time—Device to make more sunlight hours available for business, industry, leisure by setting all clocks forward one hour during summer, when sun rises early, thus saving evening use of artificial light. This device was first used as national economy during World War I.

Greenwich Mean Time—The International Meridian Conference held in 1884 established the meridian passing through Greenwich, England as the prime meridian, from which the world's time was to be reckoned. The world is considered as being divided into 24 zones each of 15° of arc, or one hour in time apart. The meridian of Greenwich (0°) extends through the centre of the initial zone and the zones to the eastward are numbered from 1 to 12 with the prefix 'minus' indicating the number of hours to be subtracted to obtain Greenwich time. The zones to the westward are similarly numbered, but prefixed 'plus' showing the number of hours that must be added to get Greenwich time.

Time Zones—The 15 degree measurement divides Europe into three times zones—*Greenwich, Mid-European* (one hour faster), *East European* (2 hours faster). The United States is divided into four times zones—*Eastern, Central Mountain* and *Pacific.*

International Date Line—is an imaginary line extending north and south through Pacific Ocean, and is the point at which the traveller must add or subtract a day from the calendar. On a journey westward across the Pacific, he must add a day (for example, by changing Monday, the 17th to Tuesday, the 18th); when travelling eastward, he is required to set the date back one day, otherwise he will not be in accord with the local date when he returns to his starting place after making trip round the world.

Indian Standard Time—The Indian Standard time which is 5½ hours ahead of Greenwich Mean Time was first adopted on 1st January 1906. It was based on the mean time of 82½°E longitude which passes through Banaras and Cocanada. Though it was used by Railways and Post and Telegraph Offices, Calcutta had its own time 24 minutes ahead of it. During World War II, a uniform time 6½ hours ahead of Greenwich time was adopted in India. India now observes Indian Standard Time, which is 5½ hours ahead of Greenwich.

Longest and Shortest days—Longest day is the day on which the sun attains its greatest distance from the equator, north or south, accordingly as the place is in the northern or southern hemisphere. This generally falls on June 21. Similar considerations apply to the shortest day of the year which falls on December 22.

Dog days—are the most unwholesome period of the year in the northern hemisphere. The period of dog days are July 3 to August 15.

HOLIDAYS

Hindu Festival

Durga Puja—a national festival in Bengal. The celebration signifies the triumph of good over evil and the subjection of animal passions by human beings. It is also symbolical of womanhood's strength and power to combat all forms of reaction. According to *Puranas*, a demon, Mahisasura was threatening gods and men. Durga, the embodiment of Divine Power took human form and bearing weapons in her ten hands slew the demon. Hence the form in which the goddess is worshipped is that of a warlike figure having ten arms and riding astride a lion. The goddess descends from her heavenly home, the Kailash to visit her children on earth three days every year, accompanied by her two sons, Kartick, a Great Warrior, and Ganesh, the God of Prosperity and two daughters, Lakshmi, the Goddess of Wealth and Saraswati, the Goddess of Learning. On the fourth day, the immersion ceremony takes place and the image of the goddess is consigned to the waters. The tradition says that on the last day, Ramchandra of Ramayana offered special prayers to the Goddess and thus gained victory over Ravana, the Demon King of Lanka (Ceylon). Hence the last day of the Puja is known as *Vijaya* (victory) day.

Sivaratri—festival in honour of the Hindu God Siva, one of the Hindu Trinity. It takes place in the month of February-March.

Holi—Hindu festival in March. It marks the coming of the spring. The festival in general is held in honour of Krishna. The day is celebrated in great merriment and fun and coloured waters are thrown over relatives and other people. It is a great festival of north India.

Dewali—a great festival of lights held in October-November. The festival is celebrated by means of illuminations and fireworks. In some provinces Hindu merchants begin their fresh account books. The legend says that its celebration began with the coronation of King Rama.

Ganesh Chaturthi—a great Hindu festival of the Western India generally takes place in September in honour of Hindu God Ganesh who is represented with four hands and an elephant's head. This festival is also known as *Ganapati Day* or *Coconut Day.*

Dusserah—it is a great festival of northern India: it usually takes place in the month of September or October. The festival takes place in honour of the victory of Goddess (*Devi*) over the buffalo-headed demon Mahisasur. The festival takes place for nine days known as *Navaratri.* It also commemorates the victory of Rama over the demon king Ravana. In all important towns of northern India huge effigies of Ravana is made and burnt on the last day of the festival in great pomp and pageant.

Saraswati Puja—usually takes place in the month of Magh (January-February) on the fifth day (*Panchami*) of the new moon. This day, according to Hindus, heralds the advent of spring. Saraswati is the Goddess of Learning.

Christian Festival

All Fool's day—The first day of April, when from centuries throughout the Christendom it has been customary to place irresponsible tricks on one's neighbours.

Arbor day—Annual tree planting day is generally observed throughout U.S.A. in parts of Canada and Great Britain.

Bank Holiday—In Great Britain a secular day when by law banks are closed, and parties are exempt from presentment or payment of negotiable paper.

Candlemas day—In its ecclesiastical meaning Candlemas is the feast of purification of the Virgin Mary and is observed on February 2. This festival is strictly kept by Roman Catholic Church.

Christmas—meaning Christ's Mass, is applied to the festival commemorating the birth of Christ celebrated on December 25. The exact date of Christ's birth is unknown. January 6 and December 28 however, were commonly chosen in the 4th century. The general adoption of December 25, first in the west and a little later in the east, dates from the 5th century.

Easter—The season which commemorates the death and resurrection of Jesus Christ is universally regarded as the chief of Christian festivals.

Good Friday—The Friday before Easter, celebrated in commemoration of the crucification of Jesus.

Holloween—The name of the popular, boisterous autumn celebration means 'holy eve', the occasion being the eve of 'All Hallows' or 'All-Saints' Day', November 1. It has the Pagan origin.

Lent—A word from the Anglo-Saxon *lencten* meaning "spring-time." It is employed to denote the forty days preceding Easter, the period observed in the Catholic Church as a fast.

St. Valentine's day—A festival which falls on February 14. The origin of the observance of this day is uncertain. Among the many interesting folk customs of medieval France and England, was a gathering of young people on St. Valentine's eve. 'Valentine' means sweet-heart.

All Soul's Day—Day of prayer for souls of the dead.

Moslem Festival

Bakr-id—The festival commemorates the ordeal of Ismail and the miraculous way in which at the last moment Providence came to his rescue.

Abraham, called Khalilulla, or the friend of God, was put to a terrible test when he was asked to sacrifice what was dearest to him, and he decided to offer the life of his beloved son Ismail. As he was on the point of applying the knife to Ismail's throat with his eyes blind-folded it was revealed to him that this was meant only to test his faith and that he would, on opening his eyes, find a ram which he should sacrifice in the name of Allah.

It has also a symbolical aspect: the sacrificial animal standing for the evil in human nature, which must be continually surrendered at the altar of God. Held on the 10th of Zil Hijja in memory of Abraham's offering of Ismail which is the version of the Koran, camels, cows, sheep, goats, kids or lambs are sacrificed.

Muharrum—is a period of mourning in remembrance of the death of Hussain, the son of Ali by Fatima, daughter of Mahomed. Hasan, son of Ali was poisoned at the instigation of the future king Khalif Yezid in 49 A.H. and Hussain was murdered at Karbala on the 10th Muharrum 61 A.H.—9th October, 680 A.D.

Akhiri-Chahar Sumbha—held on the Wednesday of Safar when Mahomed recovered a little in his last illness and bathed for the last time.

Sabi-barat—(night of allotment)—held on the 16th Saaban when it is supposed that human deeds are measured and their needs allotted.

Ramzan and Id-ul-fitr—Ramzan is the ninth month of the Moslem lunar year and is holy because the Qoran was revealed in that month. The fast is ordained in a magnificent passage of the Qoran. The fast springs from Qoranic instructions for the better communion with the God whom all men must honour and worship and that those instructions are obeyed by the faithful with the greatest devotion and loyalty. The period begins with the first sight of the new moon of the month or if the day be overclouded and the moon invisible, on the completion of the thirty days from the previous moon. Each day's fasting must begin so soon as day-break permits a white thread to be discerned from a black thread and it continues till sunset.

Buddhist Festival

Full Moon of Vaisakha—is the most sacred day in the Buddhist calendar. On this day, under the spreading emerald canopy of the *Sal* tree in the beautiful garden of Lumbini was born of queen Maya, Prince Siddharta, the Buddha to be.

Ashada Purnima—is in commemoration of the first sermon of the Buddha at Sarnath, Banaras.

Vas Pavarana—(End of rainy season lent) is held in October.

ASTRONOMICAL DATA

Solar System—By the solar system, we mean the earth and other eight planets and their moons or satellites. They are the sun's family, rotating in a regular course about the sun, just as moon goes round the earth. The sun holds his family in place by the force of gravitation. The planets have no light of their own. When we see a planet, we are really seeing the reflected light of the sun's rays. The nine planets of the solar system in order of their distance from the sun are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto.

Elements of Solar System

Names	*Average distance from Sun (miles)*	*Average diameter (miles)*	*Periods of revolution in days*	*Diameter in miles*	*Distances (Earth = I)*
Mercury	36,000.000	3,000	87·97	3,008	0·70
Venus	67,000,000	7,000	224·70	7,576	0·88
Earth	93,000,000	7,920	365·26	7,918	1·00
Mars	141,000,000	4,200	686·98	4,216	0·72
Jupiter	483,000,000	87,000	4,332·59	86,683	0·24
Saturn	886,000,000	71,500	10,759·20	72,332	0·13
Uranus	1,782,000,000	32,000	30,685·93	30,878	0·23
Neptune	2,793,000,000	33,000	60,187·64	32,932	0·29
Pluto	3,680,000,000	4,000	90,470·23	3,750	0·29

Sun—There are countless millions of far distant self-luminous gaseous bodies called stars and each one is in itself a sun. Our sun is an almost round body of fiery gaseous matter, averaging 864,000 miles diameter; its average distance from the earth is 92,900,000 miles. By the force of its gravitational attraction, the Sun keeps the planets in their regular orbits and pulls them with it through space at the rate of about 12 miles per second. The surface temperature of sun is 6,000 degree centigrade or 11,000 degrees Fahrenheit. Its surface area approximately is 12,000 times that of the earth and in volume or bulk it is about 1,306,000 times the size of the earth.

Earth—The circumference of the Earth is 25,000 miles at the equator. Though the earth appears to us stationary, it is in fact spinning round on its axis once in every 24 hours and it spins from west to east. Besides spinning on its axis, the earth moves round the Sun. The path of the earth round the Sun called its orbit is not a circle but an oval or ellipse and the plane in which the Earth moves is said to be Plane of the Ecliptic. The time taken to complete one revolution round the sun is one year *i.e.*, 365¼ days approximately. The seasons are due to the changes of the Earth's position in the course of its revolution about the Sun and to the inclination of its axis.

Moon—is the only satellite of the earth, from which her mean distance is 239,000 miles, occupies an average period, in her revolution round the earth of 29 days, 12 hours, 44 minutes, 5 seconds; her diameter is 2,160 miles with a surface deeply pitted by great craters. It has no atmosphere, and it shines entirely by reflected light of the Sun.

Moon causes *Tides* by drawing the sea after it as the earth spins. The highest tides called spring tides, occur when attractions of the Sun and the Moon act in unison. The Moon being closer to the earth than Sun has the stronger attraction or pulling power, but Sun pulls the water also. It is when they pull together in the same direction that the highest tides occur (on New and Full moon days). The longest or neap tides occur when lines joining the Sun and Moon to the Earth are at right angles to one another.

Other planets—*Mercury* is the smallest planet and is the nearest to the sun and it is less than half the earth's size. Its period of revolution around the Sun is 88 days; *Venus* has no satellite, but is otherwise much like the earth in size and mass and in having atmosphere. It is the brightest planet. Its period of revolution around the Sun is 225 days. *Mars* comes closer to the earth than any other major planet at a time suitable for observation—within 35,000,000 miles at its nearest point. Its period of revolution around the Sun is approximately 686 days. It is the planet which scientists believe is the most likely to have animal life. *Jupiter* is the largest of nine planets revolving around the Sun in about 12 years. Jupiter has at least nine satellites or moons. *Saturn*, a fluid and probably gaseous body takes almost 30 years to revolve around the Sun. Saturn is encircled by three transparent rings with thickness of between 20 and 40 miles. Like Jupiter, Saturn has at least nine satellites. *Uranus* with its four moons discovered by Sir William Herschel in 1781 takes 84 years to revolve around the Sun. *Neptune* was discovered in 1845. Its period of revolution around the Sun is almost 165 years. It has one satellite. *Pluto*, the most distant known planet of the solar system was discovered in 1930. It takes 248 years to revolve around the Sun.

Asteroids—are also called minor planets. They are of small bodies which revolve round the sun in orbits lying between those of Mars and Jupiter. About 2,000 have already been recorded. The largest is Ceres, 485 miles in diameter. Some of these celestial bodies are perhaps nothing more than great masses of rock flying round the sun.

Comets—They are occasional visitors to the sun's family, outside the planets and their moons. These are called comets, large masses of small particles and gases. They have long tails, and look like flaming snakes hurtling through the sky. Comets are of varying sizes but average diameter of the heads of a large number of observed comets is about 80,000 miles and the tail length may stretch out to more than 100,000,000 miles. A curious thing about comets is that their tails always trail from the head in a direction away from the Sun, so that when a comet is moving away from the Sun, the tail stretches out in front of the head. A few comets travel in hyperbolic orbits, never returning, but most comets return over a period of years. The most famous are Halley's comet which can be seen every seventy-five years.

Meteors—Meteors are masses of mineral or metal or both that plunge into earth's atmosphere at great speed and become incandescent from the resultant friction so that they are seen in the sky as fireballs or "shooting stars". The majority of meteors are burned up long before they strike the earth's surface and those which reach the ground are known as *meteorites*. The largest meteorite ever found is located near Grootfontein, southwest Africa which weighs between 50 and 70 tons. The second largest meteorite (weight 36½ tons) was found at Cape York, Greenland.

Constellations—group of fixed stars named after a mythological person, animal, etc. It must have been earliest observers, several thousand years B.C. who recorded that the 'fixed' stars are not scattered uniformly over the sky but appear to be grouped into figures, now named constellations. This confines us to stars visible to the naked eye, and also those of Milky Way. The constellations covering the whole celestial sphere are divided into three groups according to the regions in which they are seen—the Northern, the Southern and the Zodiacal.

Satellites—The secondary bodies which revolve around the planets, as the planets revolve around the sun, are called satellites. With the exception of Mercury and Venus, all of the planets are accompanied by one or more satellites. Earth has one satellite, moon; Mars has two; Jupiter nine; Saturn, ten; Uranus, four; and Neptune, one.

Stars—are luminous heavenly bodies, so far distant from the solar system that the light from the nearest star travelling at the speed of 186,000 miles per second, takes four years to reach the earth.. Unlike the planets, the stars shine by their own light. The total number of stars is probably in the neighbourhood of three to four billion; of this number 6,000 are visible without the aid of telescope. The stars 'twinkle' as we gaze at them. This twinkling is caused by refraction through the earth's atmosphere.

Polar Auroras—The *Aurora Borealis* (northern lights) and *Aurora Australis* (southern lights) are luminous atmospheric phenomena which occur in the Arctic and Antarctic regions respectively. The auroras are now directly attributed to sun-spots. Sun-spots are magnetic storms of great dimensions on the surface of the Sun and they shoot out electrified particles into space. Those that come towards the Earth are drawn towards the Earth's magnetic poles and consequently these magnetic poles are the radiating centres of those spectacular electro-magnetic displays in the sky known as *Northern Lights* or *Southern Lights.* The electrical particles from the sun-spots strike the upper regions of our atmosphere where the component gases are very much rarefied and cause them to vibrate and glow in colours characteristic of the various elements, just as a neon sign glows when an electric charge is passed through it. There are indefinite variety of aurora display. Lights sweep across the sky in waves, in streamers and in folds like draped curtains or as stationary glow. The lights are red or green or pastel shades.

Milky Way—*Milky Way* is a hazy, somewhat irregular band of light about 20″ wide which completely encircles the heavens. It is seen on clear, moonless, summer evenings stretching entirely across the northern sky.

Atmosphere—The atmosphere is composed of air which surrounds or envelopes the whole earth. It is sometimes likened to a great sea of gases, at the bottom of which we live. This air which surrounds the globe affects the light that comes to us from heavenly bodies. It refracts (bends or changes the direction) light rays that enter it. The principal constituents are oxygen and nitrogen in about the proportion of 21 per cent of the former and 78 per cent of the latter by volume, the remaining one per cent being made up of five other gases. Water vapour is always present in the lower atmosphere, but in a variable quantity.

ANTHROPOLOGICAL INFORMATION

RACES OF MANKIND

Race "a Social myth"—The United Nations Educational, Social, and Cultural Organization has published on 18th July, 1950 a statement setting forth the conclusions of an international panel of scientists formed by UNESCO to define the concept of race and to summarize the most recent findings in this field which the world's biologists, geneticists, psychologists, sociologists, and anthropologists agree, are established scientific facts.

The main points of the conclusions are:—

(1) Racial discrimination has no scientific foundation in biological fact. There is no proof that the groups of mankind differ in intelligence, tem-

(2) The range of mental capacities in all races is much the same. perament, or other innate mental characteristics.

(3) Extensive study yields no evidence that race mixture produces biologically bad results. The social results of race mixtures are to be traced to social factors. There is no biological justification for prohibiting inter-marriage between persons of different ethnic groups.

(4) Race is less a biological fact than a social myth. As a myth it has in recent years taken a heavy toll in human lives and suffering and still keeps millions of persons from normal development, and civilization from the full use of the co-operation of productive minds.

(5) But, scientifically, no large modern national or religious group is a race. Nor are people who speak a single language, or live in a single geographical area, or share in a single cultural community necessarily a race.

(6) Tests have shown essential similarity in mental characters among all human racial groups. Given similar degrees of cultural opportunity to realize their potentialities, the average achievement of the members of each ethnic group is about the same.

(7) All human beings possess educability and adaptability, the traits which more than all others have permitted the development of men's mental capacities.

Homo Sapiens—We now give general classification of human race as is prevalent now a days. Classification of human into groups called 'races' rests upon the basic fact that all peoples belong to the same genus and species, *Homo Sapiens*. It implies that all peoples are much more alike than different.

Two things are noteworthy—(1) most of the physical traits are external, (2) physical traits are so variable that a single trait has virtually no diagnostic value. So "race" is defined simply as a sub-group of Mankind more or less set apart by a combination of physical traits.

Method of Classification—Scientists classify man by using number of physical traits, such as stature, headform, skin colour, hair colour, form and texture, eye colour, nose shape, mouth form, shape of face with special reference of cheek-bones, arm and leg proportions, etc.

(1) *Hair classification*—Some ethnologists divide mankind into three kinds—*Wooly hair, wavy hair, straight hair.*

(2) *Colour classification*—Some ethnologists classify mankind like this —*Whites, Yellow-Brown* and *Blacks.*

(3) *Group classification*—The human family has been divided into three or possibly four races—*Caucasian, Mongolian, Negroid* and *Australoid.* First three are often referred to as 'White', 'Yellow' and 'Black'.

The Caucasian or Indo-European Race (White) comprises the Persians, Jews Arabians, Hindus, Afghans, and the people of Northern Africa; also the descendants of Europeans in America, South Africa, Australia, peoples of Europe, the adjacent shores of North Africa, and of Asia Minor, and India. The following races also belong to Caucasian stock—Nordic or northwest European, Alpine or Central European, Mediterranean or southwest European, Baltic or northeast European, Dinaric or southeast European, Armenoid in western Asia Minor. These races are not, of course absolutely limited to those geographical areas.

The Mongolian Race (Yellow) is basically the peoples of Asia, but are also in the western hemisphere as the American Indians and are represented in Malaysia and in Oceania. The Mongoloids are usually divided into the following races; Senic of China and Japan, Palearctic of Siberia, Turkic and Tungic or Mongolic of Central Asia and Malayan of Malaysia. In the Western Hemisphere, they are found as Eskimos and the Indians of the Americans. In Polynesia *i.e.*, in Samoa, Tonga, Hawaii, the Mongoloid stock is a basic element with Caucasoid and some Negroid admixture.

The Negro Race (Black) is characterised by a broad and flat nose, thick lips, straight eyes, protruding jaw, kinkly hair, and dark skin varying in degrees of brownness and is composed of the natives of Africa and Oceania. They are chiefly found in West Africa, Sudan in Central Africa etc., and in Borneo, Solomons, Hebrides and Fiji.

Australoids are found in Australia as Australian aboriginals and in Japan as the Ainu. They may possibly be an element in Melanesia and in Ceylon and S. India *i.e.*, Toda, the Vedda and other tribes.

Stages of Civilisation of Man

The terms employed refer to periods, not of time but of culture and are of local application only—it is not universal in all parts of the world.

Stone Age—Age of human development in which primitive man was using stone implements and weapons. The Stone Age preceded the ages of bronze and iron. It is usually divided into four periods—(1) *Aolithic* or dawn of the stone age which lasted 6,000,000 years B.C.; (2) *Paleolithic*, or old stone age lasting perhaps 400,000 to 100,000 B.C. in which weapons and sharp stone tools were made from hard stone (flint) by chipping; (3) *Mesolithic*, a traditional period intermediate between the old and new stone ages, lasting perhaps until 10,000 B.C. when arrow and spear-heads were made and (4) the *Neolithic* or New stone age in which tools were perfected by grinding and polishing the stone. The new stone age lasted in Europe for some 5,000 years. In different parts of the world, the stone age existed at different times. Fire was probably discovered some 60,000 years before Christ.

Bronze Age—The period when early man used bronze for his tools and weapons, this superseding the use of stone. Its date differs in various areas. In the East it began probably about 5,000 B.C. and in the West perhaps 2,000 B.C. and continued until about 1,000 B.C.

Iron Age—The cultural phase of human civilisation marked by the use of iron specially for edged tools and weapons. In Europe and West Asia it usually followed the copper-using or bronze-using phase or age; in Africa it directly succeeded the stone-age. In Europe, iron working became general in the Mediterranean region about 1,000 B.C. subsequently two pre-Christian periods occurred, each of about 500 years.

Pre-historic Races

Pithecanthropos erectus (erect ape-man or Java man)—This is generally believed to be the earliest manlike animal. Held to be a creature of pleistocene time about mid-way between the orang-utan and man, (1891-1892).

Sinanthropos pekinensis (Peking man)—Of higher development than Java man, but of approximately same period. Fosilized remains of 10 individuals were found in a cave about 40 miles from Pekin between 1926 and 1930. The brain capacity is estimated to be about one-fourth larger than that of Java man.

Australopithecus Africanus (erect man-ape)—A skull was found in Cape Colony in 1925.

Hemo Heidelbergensis (Heidelberg man)—Primitive man of pleistocene period discovered in Heidelberg, Germany (1907). The jaw-bone is man-like, although it bears no trace of a chin. The teeth which are remarkably well-preserved, are unmistakably of human type.

Piltown skull (Eoanthropos or primitive man)—Primitive man of early palaeolithic times found in Piltdown, Sussex (1912).

Neanderthal Man—Oldest known dolichocephalic (long-headed) race in Europe, living about 50,000 years before Christian era. Human remains were first discovered in 1857 near Dusseldorf, Germany, in Neanderthal, after which this type of human beings has been named.

Homo primigenius—Of last palæolithic times from 35,000 to 15,000 B.C. (1895-1906).

Note—Figures in parenthesis denote years in which discoveries were made.

GEOGRAPHICAL INFORMATION

AREA OF THE CONTINENTS

	Sq. miles		*Sq. miles*
Antarctica	5,000,000	Europe	3,900,000
Africa	11,600,000	North America	9,400,000
Asia	17,200,000	South America	7,200,000
Australia	3,000,000		

WORLD DIMENSIONS

	miles		*Sq. miles*
Diameter of either Pole	7,899·99	Surface area	196,950,284
Diameter of equator	7,926·68	Water area	139,950,284
Mean diameter	7,819·00	Land area	57,000,000
Circ. of equator	24,902·37		

PRINCIPAL RIVERS

	Miles long		*Miles long*
Missouri-Mississippi (U.S.A.)	4,502	Obe (Asia)	2,700
Amazon (S.A.)	4,194	Niger (Africa)	2,600
Nile (Africa)	3,600	Amur (Asia)	2,500
Yangtse (Asia)	3,400	Hoang-Ho (Asia)	2,600
Yenesei (Asia)	3,300	Mackenzie (Canada)	2,514
Congo (Africa)	3,000	Volga (Europe)	2,450
Lena (Asia)	2,800	Yokon	2,000
Mekong (Asia)	2,800		

OCEANS

	Area (sq. m.)	*Greatest known depth*	*Place of greatest known depth*
Pacific Ocean	63,801,700	35,400	off Mindanao
Atlantic Ocean	31,830,800	30,246	off Puerto Rico
Indian Ocean	28,356,300	22,968	off Sumatra Java
Arctic Ocean	5,440,200	17,850	77° 45′N; 175°W

HIGHEST MOUNTAIN PEAKS

Name	*height (ft.)*	*Range Location*	*Interesting Facts*
Aconcagua	22,834	Andes (Argentina)	Highest peak in the new world
Chimborazo	20.702	Andes (Equador)	....
Cotapaxi	19,500	Andes (Equador)	Highest volcano in the world
Dhaulagiri	26,795	Himalayas (Nepal)	Fourth highest peak in the world
Elbruz	18,468	Caucasus (Europe)	Highest mountain of Europe
Everest	29,002	Himalayas (Nepal-Tibet border)	Highest mountain in the world
Fujiyama	12,395	Japan	Secred mt. of Japan
Godwin-Austen or K2	28,191	Karakoram (India)	Second highest mountain in the world
Illampu	21,276	Andes (Bolivia)	....
Kanchanjunga	28,148	Himalayas (Nepal-Sikkim border)	Third highest mountain in the world
Kilimanjuro	19,710	East Africa	Highest point in Africa
Logan	19.850	St. Elias (Canada)	Highest peak in Canada
McKinley	20,300	Alaska	Highest peak in North America.

HIGHEST AND LOWEST ALTITUDES

	Highest Pt.	*ft.*	*Lowest Pt.*	*Below Sea level*
			Sea level	..
N. America	Mt. McKinley	20,300	Death Valley	
S. America	Mt. Aconcagua	22,835	(California)	280
Europe	Mt. Elbruz	18,468	Caspian Sea	86
Asia	Everest	29.002	Dead Sea	1,290
Oceanea	Kosiusko	7,328	Lake Eyre (S.	
Africa	Kilimanjaro	19,319	Australia)	38
Antarctica	Thorvald Nelson	15,410	Libyan Desert	440

LARGE LAKES

	Sq. Miles		*Sq. Miles*
Caspian Sea	170,000	Nayasa (Africa)	14,200
Superior (U.S.-Canada)	31,820	Tanganyika (Cen. Africa)	12,700
Victoria (E. Africa)	26,640	Baikal (S. Siberia)	12,150
Aral (Asiatic Russia)	24,600	Great Bear Lake (Canada)	12,000
Huron (U.S.-Canada)	23,010	Great Slave Lake (Canada)	11,170
Michigan (U.S.A.)	22,400	Erie (U.S.-Canada)	9,940
Chad (Africa)	20,000	Winnipeg (Canada)	9,398

VOLCANOES

	ft.		*ft.*
Chimbrozo, Equador	20,577	Sangay, Equador	17,470
Cotopaxi, Equador	19,344	Mauna Kea, Hawaii	13,784
Mauna Loa, Hawaii	13,675	Hekla, Iceland	4,747
Fuji, Japan	12,385	Vesuvious, Italy	3,858
Etna, Sicily	10,741	Stromboli, Lipari Isles	3,022
Iliamna, Aleutian Isles	11,000	Popocatepetl, Mexico	17,833
Hualalai, Hawaii	8,269	Kilauea, Hawaii	4,090

LARGE ISLANDS

	Sq. Miles		*Sq. Miles*
Greenland, N. Atlantic	839,782	Java, Indian	48,504
New Guinea, Pacific	312,329	North Island, N. Z.	44,281
Borneo, Pacific	290,285	Cuba, Atlantic	42,734
Madagascar, Indian	228,589	Newfoundland, Atlantic	42,734
Baffinland, Arctic	201,600	Luzon (Philippines), Pacific	40.814
Sumatra, Indian	163,145	Iceland, Atlantic	39,688
Honshu (Japan), Pacific	91,278	Mindanao (Philippines)	36,906
Great Britain, Atlantic	88,133	Ireland, Atlantic	31,840
Victoria, Arctic Ocean	80,450	Tasmania, South of Australia	26,215
Celebes, Indian	69,255	Ceylon, Indian Ocean	25,400
South Island, N. Z.	58,093		

PRINCIPAL DESERTS

	Sq. miles		*m. long*
Gobi (*Mongolia, Asia*)	300.000	Atacama (*N. Chile*)	400
Sahara (*Arica*)	3,500.000	Talka Makan (*S. Central Sinkiang in Tarim Basin*)	700
Kalahari (*South Africa*)	120,000	Great Arabian (*most of Arabia*)	1,500
Libyan (*East portion of Sahara west of Nile*)	500,000	Thar (India)	300 m. by 380 m.
Kizil Kum (*Central Turkistan southeast of Lake Aral*)	70,000		
Kara Kum (*s.w. Turkistan south of Lake Aral*)	110,000		

GEOGRAPHICAL SURNAMES

Island of pearls—Bahrein (Persian Gulf).
World's lonliest island—Tristan De Cunha (Mid-Atlantic).
Roof of the World—Pamir Plateau.
Eternal City—Rome.
Gift of the Nile—Egypt.
Land of the Midnight Sun—Norway.
Land of Morning Calm—Korea.
Holy Land—Palestine.
Hermit Kingdom—Korea.
Island of Cloves—Zanzibar.
Land of White Elephant—Siam.
Empire City—New York.
Pillars of Hercules—Strait of Gibraltar.
Key of the Mediterranean—Gibraltar.
Rose-pink City—Jaipur.
Land of white Elephant—Siam.
Whiteman's grave—Guinea coast of Africa.
Empire City—New York.
Sugar bowl of the world—Cuba.
Windy City—Chicago.
Blue Mountains—Nilgiri Hills.
Venice of the North—Stockholm.
Forbidden City—Lhasa.
Land of Cakes—Scotland.
China's Sorrow—Hoang Ho.
Gate of tears—Strait of Bab-el-Mandeb.
Pearl of the Antilles—Cuba.
The Corridor—A strip of land in Poland separating Germany from East Prussia.
Granite City—Aberdeen.
Playground of Europe—Switzerland.
City of Seven Hills—Rome.
Land of Rising Sun—Japan.
Dark Continent—Africa.
Emerald Isle—Ireland.
Land of Maple—Canada.
Land of Five Rivers—The Punjab.
Gateway of India—Bombay.
City of Palaces—Calcutta.
Land of Golden Fleece—Australia.
City of Sky-Scrapers—New York.
Cockpit of Europe—The Balkans.
Land of Thousand Islands—Finland.
City of Magnificent Distances—Washington D.C.
Bengal's sorrow—Damodar.
Never Never Land—Vast prairies of northern Australia.
Queen of the Adriatic—Venice.
The Down Under—Australia.

LONGEST TUNNELS

	miles		*miles*
Tanna, *Japan*	13½	St. Gothard, *Swiss-Italian Frontier*	9⅛
Simplon, *Swiss Italian Frontier*	12¼	Mont Cenis, *France*	8
Appennines	11½	Ariberg, *Tyrol*	6½
Loetschbeg, *Switzerland* ..	9¼		

IMPORTANT MOUNTAIN PASSES

	Altitude (feet)		*Altitude (feet)*
Alpine (Colorado, U.S.A.)	13,550	St. Bernard (Swiss Alps)	8,100
Bolan (Baluchistan) ..	5,880	St. Gotthard (Swis Alps)	6,936
Brenner (Austrian Alps) ..	4,588	Shipka (Bulgaria) ..	4,300
Khybar (Afghanistan) ..	3,373	Simplon (Swiss Alps) ..	6,595

SHIP CANALS

	Length miles	*Width in feet*
Albert (Belgium)	80·6	53·0
Beaumont-Port Arthur (U.S.) ..	40	200
Brussels-Rupel (Belgium) ..	18·5	52·5
Cape Cord (U.S.)	17·5	450·0
Chesapeake and Delaware (U.S.)	19·0	250·0
Corinth (Greece)	4·0	69·0
Falsterbo (Sweden)	1·0	82·0
Gotta (Sweden) ..	47·0	23·6
Houston (U.S.) ..	50·0	200·0
Kiel (Germany) ..	53·3	144·0
Manchester (England) ..	46·5	65·0
Moscow-Volga (Russia) ..	80	98·4
Panama (Canal Zone) ..	50·0	110·0
St. Lawrence (Canada) ..	46	45
Sault Ste. Marie (Canada) ..	1·2	60·0
Do. (U.S.) ..	1·6	80·0
Suez (Egypt) ..	87·5	197·0
Welland (Canada)	27·6	80·0

GEOGRAPHICAL RECORD-BREAKERS

Highest Mountain System ..	Himalayas.
Longest Mountain System ..	Andes.
Highest Plateau	Tibet.
Longest River	Mississippi-Missouri, 4,502 miles long.
Largest River (in volume) ..	Amazon.
Largest River Basin ..	Basin of Amazon, 2,702,800 sq. miles.
Largest Salt Water Lake ..	Caspian Sea.
Largest Fresh Water Lake ..	Superior.
Largest group of Islands ..	Malaya Archipelago.
Largest Artificial Lake ..	Lake Mead at Boulder Dam (U.S.A.).
Largest north to south stretch of land	America: N. and S. extend from Arctic to the Antarctic Ocean.
Largest inland sea	Mediterranean Sea.
Largest ship canal	Baltic White Sea Canal, 152 miles long.
Deepest Ocean	Pacific Ocean.
Largest Island	Greenland, 846,740 sq. miles.
Densest Population ..	Java (817 to the sq. mile).
Hottest Regions	North-west Sahara, Azizia (Tripolitania), Death Valley (California), and Thar Desert of North-west India.
Coldest Region	Verkoyansk in North-East Siberia where temperatures of 90° below zero have been recorded.
Largest Continent	Asia.
Largest Peninsula	India.
Highest Country	Tibet.
Biggest Ocean	Pacific Ocean.
Most Northernly Town ..	Hemmerfest in Norway, 275 miles north of Arctic circles.
Largest Desert	Sahara (Africa).
Largest City	London (Population, 8,204,000).
Highest Peak	Mt. Everest (29,002 ft.).

Densely Populated Country	China.
Rainiest Place	Cherrapunji (Assam).
Largest Volcano	Mauna Loa (crater 12,400 ft.).
Highest Volcano	Chimborazo in South America (20,702 ft.)
Smallest Continent ..	Australia.
Deepest Lake	Lake Baikal (Siberia).
Highest Lake	Lake Titicaca (Bolivia, 12,000 ft. above sea).
Saltiest Sea	Dead Sea.
Smallest Independent State	Vatican City (109 acres).
Largest State	U.S.S.R.
Largest Delta	Sundarban delta (8,000 sq. miles).
Longest Thoroughfare ..	Broadway, New York.
Highest City	Phari, Tibet, altitude 14,300 ft.
Largest coral formation ..	The Great Barrier Reef along north-eastern coast of Australia.
Lowest body of water ..	Dead Sea.
Deepest place in the ocean ..	Off the island of Mindanao in the Philippines where a sounding of 35,400 ft. has been reached.

WORLD EXTREMES OF CLIMATE

Coldest Place—Verkoyansk (Siberian village)—90°F below zero.

Hottest Place—Azizia (Libya)—136·F (Sept. 13, 1922) and Death Valley (California)—134°F. (July 10, 1913).

Minimum recorded Rainfall —·04 inch at Iquique, Chile—average yearly fall during 40 years.

Lowest mean annual temperature—14°F. at Framheim, Antarctica.

Maximum recorded rainfall—366 inches in one month at Cherrapunji, Assam (India), July, 1861. Average annual rainfall is 426 inches. The world's heaviest rainfall is 906 inches in 1861 at Cherrapunji.

FAMOUS WATERFALLS

Name and location	*Height ft.*
Angel (Venezuela) ..	3,300
Tugela (Natal, S. Africa)	2,810
Kukenaam (Br. Guinea—(S.A.)	2,000
Southerland (S. Island, N.Z.)	1,904
Ribbon (California) ..	1,612
Gavarnie (France) ..	1,515
Upper Yosemite (California)	1,430
Takkakaw (Br. Columbia)	1,200
Staubbach (Switzerland)	980
Trummelbach (Switzerland)	950
Middle Cascade (California) ..	910
Multnomach (U.S.A.) ..	850
Vettisfos (Norway) ..	850
King Edward VIII (Br. Guinea) ..	840
Gersoppa (Mysore, India)	830
Kaieteur (Br. Guinea) ..	741
Kalambo (Tanganyika) ..	705
Fairy (America) ..	700
Maradalefos (Norway) ..	650
Skykkjefos (Norway) ..	650
Terni (Italy)	650

SOME GREAT EARTHQUAKES

	Deaths
1290 Sept. 27—China	100,000
1556 Jan. 24—China	830,000
1693 Jan. 1—Italy	60,000
1737 Oct. 11—India Calcutta	300,000
1755 Nov. 1—Portugal	60,000
1868 Aug. 16—Equador, Peru	70,000
1902 May 8—Martinique, West Indies	40,000
1906 Apl. 18—San Francisco	500
1908 Dec. 28—Italy, Messina	75,000
1920 Dec. 16—China	180,000
1923 Sept. 1—Japan, Tokio	90.000
1932 Dec. 26—China	70,000
1935 May 31—India, Quetta	60,000
1939 Dec. 27—Turkey	100,000
Jan. 24—Chile	30,000
1948 June 28—Japan	3,000
1950 August 15—Assam	1,000

POLAR RECORDS

Arctic

Year	*Explorer*	*No.*	*Latitude*
1854	E. K. Kane (U.S.A.)	78°	45′
1871	Capt. Hall (U.S.A.)	82°	11′
1875	Capt. Nares (G.B.)	83°	20′
1882	Lieut. Greely (U.S.A.)	83°	24′
1892	Lieut. Peary (U.S.A.)	83°	27′
1895	Fridtjof Nansen (Norway)	86°	14′
1900	Duke d'Abruzzi (Italy)	86°	34′
1902	Lieut. Peary (U.S.A.)	84°	17′
1904	Ziegler Polar Expedition (U.S.A.)	82°	4′
1906	Commander Peary (U.S.A.)	87°	6′
1909	Commander Peary (U.S.A.)	90° (Pole)	..
1926	Commander Byrd (U.S.A.)*	90° (Pole)	..
1926	Amundsen-Ellsworth-Nobile†	90° (Pole)	..
1928	Gen. U. Nobile† (Italy)	90° (Pole)	..
1937	Pavel Golvin. (*Soviet Russia*)*	90° (Pole)	..
1937	Prof. Otto J. Schmidt and four others* (Soviet Russia)	90° (Pole)	..

Antarctic

Year	*Explorer*	*No.*	*Latitude*
1774	Capt. Cook (G.B.)	71°	10′
1823	Capt. Weddell (G.B.)	74°	15′
1842	Capt. Ross (G.B.)	78°	10′
1900	Borchgrevink (G.B.)	78°	50′
1902	Capt. Robert F. Scott (G.B.)	82°	17′
1909	Lieut. Shackleton (G.B.)	88°	23′
1911	Ronald Amundsen (Norway)	90′ (Pole)	..
1912	Capt. Robert F. Scott (G.B.)	90′ (Pole)	..
1929	Adml. Richard Byrd* (U.S.A.)	90′ (Pole)	..
1935	L. Ellsworth* (U.S.A.)	76-79	58
1947	Adml. Richard Byrd* (U.S.A.)	90′ (Pole)	..

---

* By airplane.

† By airship.

NATURAL WONDERS OF THE WORLD

Volcanoes—The two largest volcanoes in the world are in Equador in South America: *Chimbarazo,* 20,702 ft. and *Cotapaxi,* 19,344 ft.

Geysers—The greatest development of Gaysers is in Iceland, New Zealand and Yellowstone National Park, Wyoming, U.S.A. The most famous gayser of the park is *Old Faithful* which spouts a column of water 150 ft. into the air regularly every 63 minutes. There are altogether 120 named geysers in Yellowstone.

Waterfalls—Highest waterfall in the world is *Angel* in Venezuela which has a total height of 3,000 feet. The second largest waterfall in the world is *Tugela* 2,810 ft. in Br. Guinea in northern South America.

Canyons—The most impressive canyon in the world is *Grand Canyon* of the Colorado River, U.S.A. and extends for 217 miles with a width on the rim from 4 to 18 miles. The canyon reaches a maximum depth of about 5,500 feet below the surrounding plateau.

Caverns—*Mammoth Cave,* the largest underground cavern in the world is located in south-eastern Kentucky, U.S.A. and it extends for 10 miles with 150 miles of connected passages. *Blue Grotto*—on the island of Capri, Italy is a famous cavern hollowed out in limestone by constant wave action. Name is derived from the unusual blue light permeating the cave.

Glaciers—The principal glacial areas are in the Antarctic, Greenland, nearly all the high mountain ranges and many of the islands in the Arctic regions. The largest glaciers in the world are found in Greenland and the Arctic as well as Antarctic regions.

Deserts—Largest desert is the *Sahara* in northern Africa covering an area of about 3,000,000 sq. m. and reaching a maximum altitude of 9,000 feet above the sea level.

Mountains—The loftiest peak in the world is *Mount Everest,* 29,002 ft. in height in Himalaya mountains in Nepal.

Lakes—*Lake Superior* is the largest fresh water lake in the world. *Lake Victoria* (Africa) is the second largest lake in the World.

Oceans—*Pacific Ocean* is the largest single body of water on the surface of the globe and reaches the maximum depth of 35,400 ft. near the Island of Mindanao in the Philippines.

Gulf Stream—is a warm ocean current that originates near the Gulf of Mexico and flows north along the eastern coast of United States, then across the Atlantic Ocean, passing near Great Britain and the Scandinavian Peninsula and ending in the Arctic Ocean. Japanese current is the 'gulf stream' of the Pacific Ocean having its origin in the China Sea. This stream becomes the California Current and warms the northwestern shores of the United States.

MAN-MADE WONDERS

Pyramids of Egypt—Located on the west bank of the Nile River and extends for about 60 miles south of Gizeh, they were built during the period from 3500 B.C. to 18 B.C. to contain tombs of Pharoahs. The largest of the pyramids erected by the Cheops rises 450 ft. above the desert. It is 746 ft. square at the base and occupies almost 13 acres.

Colossus of Rhodes—A statue of the Greek Sun God Helios (Apollo) 108 ft. in height and made of brass or bronze completed in about 280 B.C. The figure stood on the island of Rhodes in the eastern Mediterranean and was destroyed by an earthquake in 224 B.C.

Pharos of Alexandria—A lighthouse of white marble about 400 ft. in height erected by King Ptolemy between 265 and 247 B.C. on the island of Pharos in the harbour of Alexandria, Egypt. It was destroyed by an earthquake in 1375 A.D.

Mausoleum of Halicarnassus—A marble tomb built in 352 B.C. at Halicarnassus in Asia Minor by Queen Artemisia for her husband Mansolus. It was 140 ft. high. It was destroyed by earthquake between 12th and 15th centuries.

Hanging Gardens of Babylon—Terraced gardens planted by King Nebuchadnezzar about 655 B.C. in Bagdad in Iraq.

Statue of Zeus at Olympia—A statue carved by Phidias in the 4th century B.C. It was placed in the temple of Olympus in south-western Greece where all who attended the Olympic games might pay homage to Zeus, King of the Greek deities.

Alhambra—A group of buildings erected chiefly between 1248 and 1354 by the Moorish King Al Ahmar and his successors on a hill above Granada in southern Spain. It is claimed to be the crowning achievement of the Moors in Spain.

Pantheon—At Rome was built in 27 B.C. It was used as temple. Literally *Pantheon* was intended as a temple of "all the Gods".

Temple of Diana at Ephasus—A monument of brightly coloured marble, designed by Stesiphon and built by the Ionians in the 5th century B.C. at the now-vanished city of Ephesus, south of Smyrna in western Asia Minor. The temple was 425 ft. in length and 225 ft. wide. It was burnt in 356 B.C.

Porcelain Tower of Nankin—An eightsided pagoda 261 feet in height erected in the 15th century by a Chinese King in eastern China. It contained eight or nine stories. It was destroyed in 1853.

Leaning Tower of Pisa—A round white marble bell-tower at Pisa, Italy and containing eight stories enclosed by columns. The tower leans about 14 feet out of the perpendicular, its height being 181 feet on the north side and 179 feet on the south side. It was built in 1350.

Stonehenge—A monument of huge stones forming three circles, supposed to be erected by a Celtic race of sun-worshippers 4,000 years ago at Salisbury Plain 90 miles from London.

Parthenon of Greece—built on the Acropolis in Athens, was the chief temple to the goddess Athena. It was believed to have been completed by 438 B.C. Though the Parthenon is in ruins, its majestic proportions are still discernible.

Great Shinx of Egypt—A stone image of a crouching lion with a human head, at Gizeh in northern Egypt and carved about 3500 B.C. The total height of Sphinx is about 66 ft., its body is 189 ft. in length.

Great Wall of China—A wall of about 1,400 miles long extending along the boundary between northern China and Mongolia. At the interval of 10 yds. are towers 40 feet high. It was begun in the 3rd century.

Great Buddhist Temple of Java—A monument of Buddhist architecture, known as *Boro Budor* and built of volcanic lava in the 9th or 8th century in Java. It shows architecture and sculpture of grandeur.

Arcopolis at Athens—A hill about 260 feet in height located in south-eastern Greece. At the summit are ruins of numerous temples originally enclosed by Doric and Ionic columns and built of marble by Pericles and Cimon in the 5th century B.C. The most notable of these structures include *Parthenon* which contained a gold and ivory statue of Athena.

7407

St. Peter's at Rome—The largest Cathedral in the world covering an area of 18,000 square yards and located in Rome, Italy. It was completed in 1632. The Cathedral's greatest length is 636 feet, its height is 435 feet.

Mayan Temples—Buildings erected by the Mayan Indians who attained a high civilization before the birth of Christ. The temples, now in ruins were built on lofty pyramid-shaped terraces and were frequently ornamented with columns in the form of feathered snakes.

Mosque of Santa Sophia—A building located at Istanbul in northern Turkey and erected by Emperor Justinian in 6th century. The Turkish Sultan Mohammed II made the structure a mosque after conquering the city in 1453.

Colosseum of Rome—The largest and most famous of Roman amphitheatres, 1,680 feet in circumference located at Rome. Built of marble and concrete with three rows of columns one above the other, the Colosseum could accommodate 80,000 spectators at a single performance and was 157 feet high containing an area 285 feet long and 182 feet wide. It was built in about 80 A.D.

Potala of Tibet—The fortress-palace of Dalai Lama who is the ruler of Tibet. Located in Potala hill overlooking a river, the structure is over 900 feet in length and resembles a fortress with many gilded roofs and towers at various levels—the highest being more than 400 feet from the ground.

Shwe Dagon Pagoda—A gilded bell-shaped structure at Rangoon to contain eight hairs of Buddha. Its base is 1,355 feet in circumference and the top is encased with gold leaf supporting 1,500 little bells of silver and gold. It is 367 feet high.

Taj Mahal—A domed square mausoleum of white marble at Agra in India built during the period from 1630 to 1649 by Emperor Shah Jahan as a burial place for his wife Mumtaz Mahal. Tajmahal is the perfect gem of moslem art.

Colossus of Mysore—A statue of 60 feet in height representing Gomateswara, a saint of the Jain religion. It was carved in 983 A.D. from a solid rock on a hill top that rises 470 feet above a plain in the State of Mysore. The image is 26 feet broad at the shoulders and stand on a circular platform.

Angkor Vat—A structure 796 ft. long and 588 feet wide in a city in Cambodia, French Indo-China, comprising a royal city of 59 sq. miles area and temple Angkor Vat. Built in 9th century by the Khmers, the enclosed temples, palaces and public building of stone are completely covered with sculptured scenes which picture life of Khmer civilization now extinct. The largest of five pagodas rises 250 feet above foundations at the centre of the temple.

Empire State Building—in New York City is the tallest building of the world reaching a height of 1,250 feet in 102 stories. The building was completed in 1931.

GENERAL INFORMATION

LONGEST RAILWAY STATION PLATFORMS

	feet		*feet*
Sone (O.T.R. India) ..	2,415	Kotri (N.W.R., Pakistan) ..	1,896
Kharagpur (B.N.R., India)	2,350	Mandalay (Burma Railways)	1,788
Bulawayo (Rhodesia) ..	2,302	Bournemouth (England) ..	1,748
New Lucknow (E.I.R., India)	2,250	Perth (Joint)	1,714

S.C.E.R.T. West Bengal
Date ....
Library

York (L.N.E.R.)	1,701	Edinburgh	1.680
Manchester Victoria Exchange (L.M.S.) ..	2,190	Trichinopoly (S.I.R.) ..	1.546
Bezwada (M.S.M., India) ..	2.100	Ranaghat (E.I.R.) ..	1.509
Jhansi (G.I.P., India) ..	2.024	Aberdeen	1.496
		Dakor (B.B.C.I.)	1.470

FAMOUS BRIDGES

	Type	*Total length (ft.)*
Golden Gate (San Francisco) ..	Suspension	9.127
George Washington (New York). ..	Do.	8,700
San Francisco-Oakland Bay ..	Suspension-Cantilever-tunnel	43.560
Ambassador (Detroit, U.S.) ..	Suspension	9.000
Quebec (Quebec)	Cantilever	3.240
Delaware River (Philadelphia) ..	Suspension	8.126
Firth of Forth (Scotland) ..	Cantilever	8.098
Kill Van Kull (U.S.A.) ..	Steel Arch	8.100
Sydney Harbour (Australia) ..	Steel Arch	3.770
Bear Mountain (New York) ..	Suspension	2.252
Williamsburgh (New York) ..	Do.	7.308
Brooklyn (New York)	Do.	6.016
Lion's Gate (Canada)	Do.	2.778
Mid-Hudson (New York) ..	Do.	4 072
Manhattan (New York) ..	Do.	6,855
Triborough (New York) ..	Suspension—lift span—truss span ..	12.320
Queen'sborough (New York) ..	Cantilever	7.449
Hell Gate (New York)	Steel Arch	17.868
Cooper Charleston	Cantilever	14.500
Eads (St. Iewis)	Steel Arch	6.434
Lake Washington	Pontoon	8,644

NOTABLE TELESCOPES

REFRACTOR

Size in inches	*Observatory*	*Location*
40	Yerkes	Williams Bay U.S.A.
36	Lick	Mt. Hamilton, California
32·7	Univ. of Paris	Meudon, France
31·5	Astro-physical	Postdam, Germany
30	Alleghney	Pittsburgh, U.S.A.
30	Bischoffsheim	Nice, France
30	Poulkova	Leningrad
200	Palomar	Mt. Palomar, California

REFLECTOR

Size in inches	*Observatory*	*Location*
100	Mt. Wilson	Pasadena, California
82	McDonald	Mt. Locke, U.S.A.
74	Dunlop	Richmond Hill, U.S.A.
72	Dominion Astrophysical	Victoria B.C.
69	Perkins	Delaware, U.S.A.
61	Harvard	Oke Ridge, U.S.A.
60	Bloemfontein	S. Africa
60	Mt. Wilson	Pasadena, California
60	Cordoba	Argentina

BIGGEST VESSELS

	Gross tons		*Gross tons*
Queen Elizabeth (Br.) ..	83,673	Edinburgh Castle (Br.) ..	28,705
Queen Mary (Br.) ..	81,235	Georgic (Br.)	27,268
Liberte (Fr.)	49,746	Dominion Monarch (Br.) ..	27,155
Conte di Savoia (It.) ..	48,502	Capetown Castle (Br.) ..	27,002
Aquitania (Br.)	44,786	Britannic (Br.)	26,943
Il de France (Fr.) ..	43,450	America (U.S.)	26,314
Nieuw Amsterdam (Holl.)	36,667	Empress of Scotland (Br.)	26,032
Mauretania (Br.) ..	35,677	Andes (Br.)	25,676
Caronia (Br.)	34,183	Athlone Castle (Br.) ..	25,567
Orcades (Br.)	28,168	Stirling Castle (Br.) ..	25,554
Pasteur (Br.)	29,253	Saturnia (It.)	24,470
Pretoria Castle (Br.) ..	28,750	Vulcania (It.)	24,469

• *Atlantic Blue Riband*—Normandie (1935); Queen Mary (1936); Normandie (1937); Queen Mary 1938).

SEVEN WONDERS OF THE WORLD

(During Alexandrian Era)

The Pyramid of Egypt—Three structures are located at Giza outside modern Cairo. The largest pyramid built by Cheops had the original height of about 482 ft., now approximately 450 ft.

The Hanging Gardens at Babylon—These gardens are associated with Semiramis, a mythical Assyrian queen who was reputed to have built the city of Babylon.

The Statue of Zeus (Jupiter) at Olympia—The Statue of the father of gods and men was wrought by Phidias, greatest of Greek sculptors (5th century B.C.)

The Temple of Artemis (Diana) at Ephesus—The temple was constructed in the celebrated Etruscan era of Rome on one of the seven famous hills of ancient Rome.

The Mausoleum at Halicarnassus—Erected by Queen Artemisia in 353 B.C. in memory of his husband, King Mausolus in Asia Minor.

Colossus at Rhodes—A bronze statue of Helios (Apollo), about 105 ft. high and constructed in 280 B.C. The statue was thrown down by an earthquake in 224 B.C.

Pharos of Alexandria—On the eastern point of Pharos Island. It was a famous light house. The structure was claimed to be 400 feet high.

LARGEST BELLS

	Approximate weight in tons		*Approximate weight in tons*
Great Bell at Moscow (*World's largest*) ..	200	Notre Dame, Paris ..	18
Great Bell at Mingoon, Burma	125	St. Paul's London ..	17
Great Bell at Peking ..	55	"Great Tomb", Oxford ..	17
Novgorod. Russia ..	31	Seus, France	13
Bell at Cologne Cathedral	26	Erfuz Cathedral, Prussian Saxony	13
St. Issac's Cathedral, Leningrad	22	Montreal (R. C. Cathedral) .	13
Oulmutz, Austria ..	18	York	12
Vienna	18	Big Ben, Westminster ..	12
		Gorlitz, Silesia	10
		Brugs	10

HIGH BUILDINGS AND TOWERS

	Feet		*Feet*
Soviet Palace (Moscow) ..	1,365	Chanin Tower (U.S.A.) ..	680
Empire State (N.Y.) ..	1,250	Lincoln Building (U.S.A.)	638
Chrysler (N.Y.) ..	1,046	Waldorf-Astoria (N.Y.) ..	625
Eiffel Tower (Paris) ..	984	Ulm Cathedral (Germany)	529
60 Wall Tower (N.Y.) ..	950	Cologne Cathedral (Ger.) ..	512
Bank of Manhattan (N.Y.)	925	Rouen Cathedral (France) ..	485
R. C. A. Rockefeller Centre	850	Straussburg Cathedral (Ger.)	468
Woolworth (N.Y.) ..	792	Pyramid of Cheops (Egypt)	450
Farmer's Trust, (N.Y.) ..	767	St. Stephen's Cathedral (Vienna)	441
Terminal Tower (U.S.A.) ..	708		
Metropolitan Building (N.Y.)	700		

WORLD FAMOUS DAMS

	Height in feet	*Length in feet*	*Cubic yds. material in dam*	*Amount of water held (Billions of gallons)*
Hoover (U.S.A.) ..	726*	1,244	3,251,000	10,543
Fort Peck (U.S.A.) ..	250	21,578	109,000,000	6,325
Cauvery-Muttur (India) ..	214	5,300	1,850,000	5,978
Grand Coulee (U.S.A.) ..	550	4,173	10,000,000	3,160
Kentucky (U.S.A.) ..	150	8,655	4,415,000	1,987
Denison (U.S.A.) ..	165	14,000	15,475,000	1,898
Wolf Creek (U.S.A.) ..	242	5,730	10,250,000	1,884
Shasta (U.S.A.) ..	602	3,500	6,000,000	1,466
Gutun (Canal Zone) ..	115	8,324	22,958,000	1,437
Aswan (Egypt) ..	174	6,985	1,732,306	1,322
Marshall Ford (U.S.A.) ..	270	2,623	3,581,000	1,016
Norris (U.S.A.) ..	265	1,860	1,150,000	836
Elephant Butte (New Mexico) ..	301	1,162	605,200	859
Bagnell (U.S.A.) ..	148	2,543	551,000	749
Saluda (U.S.A.) ..	208	7,800	11,000,000	749
Hume (Australia) ..	180	5,300	4,000,000	651
Kingsley (U.S.A.) ..	162	10,200	26,000,000	651
American Falls (U.S.A.) ..	89	5,227	312,160	555
Sardis (U.S.A.) ..	117	14,550	16,842,000	508
Santee (U.S.) ..	45	41,200	9,622,000	437
Roosevelt (U.S.A.) ..	280	723	340,000	462
Dnieper (U.S.S.R.) ..	140	3,350	968,000	291
Coble Mountain (U.S.A.) ..	263	730	1,800,000	264

BIGGEST, LARGEST, GREATEST, LONGEST

Highest Mountain peak ..	Mount Everest (29,002 ft.).
Largest Desert	Sahara (Africa) 3,000,000 sq. m.
Tallest Building ..	Soviet Palace (Russia) 1,365 ft.
Largest Palace	Vatican (Rome).

---

* Highest in the world.

Biggest Ship	Queen Elizabeth (83,673 tons).
Largest Diamond Mine	Kimberly, South Africa.
Tallest Statue	Statue of Liberty (N.Y.) 151 ft. high.
Tallest Church	Ulm Cathedral (Germany, 529 ft. high).
Largest Church	Church of St. Peters (Rome).
Largest Diamond	The Cullinan.
Rainiest Place	Cherrapunji, Asam.
Biggest & Deepest Ocean	Pacific Ocean (64,000,000 sq. m.).
Longest Corridor	Rameswaram Temple Corridor, S. India. About 4,000 ft. long.
Longest Rly Platform	Sonepur Station (Bihar).
Largest Pearl	Beresford-Hope Pearl, weighing 1800 grams.
Longest Railway run	Riga to Vladivostock (6,000 miles).
Largest Telescope	At Mt. Palomar, California, diameter of reflector is 200 inches.
Largest Museum	British Museum (London).
Longest River	Mississippi-Mussorie.
Largest River (in vol.)	Amazon.
Largest Railway Station	Grand Central Terminal (New York) with 47 platforms.
Largest Dome	Gol. Gumbaz (Bijapur) 144 ft. in actual diameter.
Largest Building	The Pyramid at Gizeh Egypt.
Tallest Tower	Eiffel Tower, Paris, 984 ft. high.
Largest group of Islands	Malaya Archipelago.
Largest Delta	Sundarban Delta, comprising 8,000 sq. m.
Largest Royal Palace	The Palace at Madrid.
Largest Single Country	Brazil with an area of 3,285,319 sq. miles.
Largest Freshwater Lake	Lake Superior.
Highest Lake	Lake Titicaca (South America).
Largest Volcano	Chimborazo (20,702 ft.) Equador.
Largest & populous continent	Asia.
Longest Wall	The Great Wall of China over 1,500 miles.
Largest office building	Pentagon (U.S.A.) 34 acres, where 32,000 people work daily; floor area, 6,000,000 feet, has 17 miles of corridor.
Longest Tunnel	Simplon (Switzerland) 12 m. 458 yds. long.
Highest Dam	Hover Dam (U.S.A.) 726 ft.
Largest Peninsula	India.
Highest tree	Giant Sequoia tree in the Hambolt State Park, California—364 ft. high and estimated to weigh nearly 2000 tons.
Largest Island	Greenland (827,200 sq. miles).
Densest Population	Java (over 800 per sq. mile).
Largest Bell	Bell of Moscow, cast in 1733, 21 ft. high, 21 ft. diameter and weighs 200 tons.
Largest Planetary Body	Jupiter.
Biggest Park	Yellowstone National Park (U.S.A.) 3,350 sq. miles.
Largest Archway	Sydney Harbour Bridge (Australia).
Largest Bridge	San Francisco Oakland Bridge.
Highest City	Phari, Tibet, altitude 14,300 ft.

Longest Thoroughfare ..	.. Broadway in New York.
Biggest Bank ..	.. Bank of America (Total resources $6,072,913,000 in 1949).

MECHANICAL INVENTIONS AND DISCOVERIES

1450, Movable type, Guttenberg (German).
1608, Telescope, Lippershey (Dutch)
1643, Barometer, Torricelli (Italian).
1657, Pendulam Clock, Huygens (Dutch).
1709, Thermometer, Farenheit (German).
1752, Lightning rod, Franklin (American).
1765, Steam Engine, Watt (Eng.).
1783, Balloon, Montgolfier (French).
1785, Powerloom, Cartwright (Eng.)
1793, Cotton, gin, Whitney (American).
1798, Bleaching powder, Tennant (English).
1807, Steamboat, Fulton (American).
1815, Miner's safety lamp, Davy (English).
1816, Stethoscope, Laennec (French)
1820, Galvanometer, Sweigger (Ger.)
1824, Electromagnet, Sturgeon, (English).
1829, Steam Locomotive, Stephenson (English).
1831, Dynamo—Electric Machine, Farady (English).
1835, Revolver, Colt (American).
1835, Screw Propeller, Erricsson (Swedish).
1839, Photography, Louis Daguerre (French).
1839, Rubber Vulcanised, Goodyear (U.S.A.).
1842, Bicycle, MacMillan (Scottish)
1845, Portland Cement, Aspdin, (English).
1846, Sewing machine, Elias Howe (American).
1848, Portland cement, Johnson (English).
1849, Safety Pin, Walter Hunt (American).
1851, Induction coil, Ruhmkorff, (German).
1852, Power Elevator, Otis (American).
1855, Gas Burner, Bunsen (Ger.).
1856, Steel, Bessemer (English).
1858, Atlantic cable, Field (American).
1861, Motion picture projector, Sellers (U.S.A.).
1866, Dynamite, Nobel (Swedish).
1868, Lawn mower, Hills (American).
1868, Typewriter, Sholes (American).
1869, Air brake, Westinghouse (American).
1870, Celluloid, Hyatt (American).
1876, Telephone, Bell (American).
1877, Microphone, Berliner (American).
1877, Phonograph, Edison (American).
1877, Microphone, Berliner (U.S.A.)
1878, Electric lamp, Edison (American).
1879, Cash register, Ritty (American).
1880, Linotype, Mergenthaler (American).
1880, Cream Separator, De Laval (Swedish).
1883, Rayon, Jos. Swan (English).
1884, Fountain pen, Waterman (American).
1885, Motor Cycle, Daimler (Ger.).
1887, Electric Motor, Tesla (American).
1887, Gramophone, Berliner (American).
1888, Roll-film hand Camera, Eastman & Walker (American).
1888, Pneumatic tyre, Dunlop (American).
1888, Calsium Carbide, Wilson (American).

1891, Kinetoscope, Edison (American).
1892, Colour photography, Ives (American).
1893, Halftone engraving, Eves (American).
1895, Photo-electric cell, Elster and Geitel (German).
1895, Moving picture projector, Louis Lumiere (French).
1896, Wireless Telegraphy, G. Marconi (Italian).
1897, Diesel engine, Diesel, (German).
1900, Submarine, Holland (American).
1900, Airship, rigid dirigible, Zeppelin (German).
1903, Airplane, Wright brothers (American).
1905, Gyroscope Stabilizer, Sperry (American).
1906, Radio vaccuum tube, De Forest (American).
1909, Helicopter, Breguet.
1912, Cellophane, Brandenburger (French).
1914, Military tank, Swinton (Eng.).
1914, Stainless Steel, Brearly (Eng.).
1920, Autogyro, De la Cierva (American).
1925, Television, Baird (Scottish).
1925, Photo-telegraphy, Bell Lab. (U.S.A.).
1930, Nylon, Carothers (U.S.A.)

CHEMICAL INVENTIONS AND DISCOVERIES

(Also Applied Chemistry)

1650—Glauber: manufacture of Hydrochloric acid.
1766—Cavandish: Discovery of inflammable air (*Hydrogen*).
1774—Priestley: Discovery of Oxygen.
1783—Lavoisier: First quantitative synthesis of water.
1803—Dalton: Atomic theory: laws of chemical combination.
1809—Gay-Lussac: Laws of gases.
1818—Avogardo: Molicular hypothesis.
1828—Wöhler and Liebig: Synthesis of urea: Foundation of organic chemistry.
1839—Goodyear: Process of vulcanizing rubber.
1841—Faraday: Induction of electric current.
1846—Schönbein: Invention of guncotton.
1847—Simpson: discovered the anæsthetic properties of chloroform.
1856—Bessemer: Air blast converter for manufacture of steel.
1858—Hofmann: Aniline in coal tar; aniline dyes.
1860—Bunsen, Kirchhoff: Invention of spectroscope.
1861—Solvay: Manufacture of soda from salt.
1862—Nobel: Invention of dynamite. ✓
1868—Lockyer: Discovery of helium on sun by use of spectroscope.
1869—Mendelev: Periodic table of elements, established families of elements.
1873—Linde: Ammonia refrigeration.
1880—Laveran: discoverer of the cause of malaria.
1886—Hall: Manufacture of aluminium by electrolytic action.
1887—Arrhenius: Ionic theory of dissociation in solution.
1891—Frasch: Method of mining sulphur.
1895—Rontgen: discovered x-ray. ✓
1896—Becquerel: Radioactivity of uranium.
1896—Curie: Discovery of radium. ✓
1908—Onnes: Liquefaction of helium.
1908—Bakeland: Bakelite.

1912—Laue, Bragg: X-ray structures of crystals.
1913—Mosley: Atomic numbers.
1913—Haber: Synthesis of ammonia from nitrogen and hydrogen.
1915—Lanmuir: Tungsten filaments.
1919—Ashton: Mass spectroscope for separation of isotopes.
1923—Midgley: Tetraethyl lead gasoline.
1925—Minot: Discovered the uses of liver in cases of pernicious anæmia.
1930—Carothers & Collins: Neoprene, synthetic rubber.
1930—Carothers: Nylon Plastics.
1932—Urey: Discovery of deuterium.
1934—Joliot, Curie: Artificial radioactivity.
1934—Urey: Heavy water.

DISCOVERIES AND INVENTIONS IN ELECTRICITY

1745—Von Kleist: Leydon jar condenser.
1752—Franklin: Lightning rod and nature of lightning.
1791—Galvani: Theory of animal electricity.
1800—Volta: Current electricity and electric battery.
1826—Ohm: Laws of electrical resistance.
1828—Henry: Electromagnetism and induction.
1831—Faraday: Electromagnetic induction.
1832—Morse: Electric telegraph.
1832—Gauss: System of absolute electric measurements.
1838—Page: Induction Coil.
1870—Gramme: First industrial dynamo.
1876—Bell: Telephone.
1878—Crookes: Discovery of cathode ray.
1878—Edison: First electric incandescent lamp.
1885—Stanley: Electric Transformer.
1892—Tesla: Alternating current motor.
1892—Steinmetz: Laws of alternating current.
1895—Roentgen: Discovery of X-ray.
1896—Marconi: Practical wireless.
1897—Thomson: Isolation of the electron.
1904—Fleming: First diode radio tube.
1907—De Forest: Triode radio tube.
1914—Coolidge: Tungsten filament lamp.
1925—Baird: Discovery of television.

DISCOVERIES IN MEDICINE AND PHYSIOLOGY

1628—Harvey: Circulation of blood and function of heart.
1675—Leewenhoek: observation of bacteria by microscope.
1737—Linnaeus: System of classifying plants and animals.
1796—Jenner: Vaccination for smallpox.
1819—Laennec: Invention of stethoscope.
1842—Long: First use of ether as anesthetic in surgery.
1859—Darwin: Evolution and theory of natural selection.
1865—Mendel: Laws of heredity.
1867—Lister: Antiseptic surgery.
1880—Nicolaier: Discovery of titanus germs.
1880—Eberth: Discovery of typhoid bacillus.
1882—Metchnikov: function of white blood corpuscles discovered.
1882—Pasteur: preventive of rabies.
1882—Koch: Tuberculosis bacteria discovered.
1883—Klebs: Diphtheria bacillus.
1894—Kitasato: Discovery of plague bacillus.
1894—Roux: perfection of diphtheria antitoxin.
1897—Eijkman: cause of beriberi, vitamin deficiency.

1901—Takamine: First hormone isolated. Isolation of adrenaline.
1905—Binet: Intelligency tests.
1906—Wasserman: Tests for syphillis.
1907—Shull: Development of hybrid corn.
1907—Willslatter: Constitution of chlorophyll.
1908—Freud: Doctrine of phychoanalysis.
1910—Pavlov: mechanism of the conditioned reflex.
1912—Ehrlich: Salvarsan, cure of syphillis.
1912—Cushing: relation of pituitary gland to growth.
1913—Schick: Test of susceptibility to diptheria.
1913—Goldberger: Cause and control of pellagra.
1913—McCollum: Isolation of vitamin A.
1922—Banting, MacLeod: Insulin for treatment of diabetes.
1924—Steenbock: Production of vitamin D by ultra violet irradiation.
1926—Minot, Whipple and Murphy: Liver treatment of anæmia.
1932—Domagk: Sulfa drugs as bactericides; Banting & Best: insulin for diabetes.
1936—Stanley: Molecular nature of viruses.
1946—Du Vigneaud: Synthetic penicillin.

DISCOVERIES IN PHYSICS

1687—Newton: Law of gravitation.
1785—Coulomb: Fundamental laws of electrical attraction.
1798—Thompson: Mechanical theory of heat.
1815—Fresnel: Diffraction of light.
1840—Joule: measurements of electric current.
1847—Helmholtz: Law of conservation of energy.
1873—Maxwell: Electromagnetic theory of energy.
1896—Becquerel: Discovery of radio-activity.
1897—Thomson: Discovery of electrons.
1897—Wilson: Development of cloud chamber to detect subatomic particles.
1901—Planck: Quantum theory.
1902—Michelson: Velocity of light.
1905—Einstein: Theory of relativity. ✓
1911—Rutherford: Theory of atomic nucleus.
1913—Bhor: Electron theory. ✓
1924—De Broglie: Wave nature of the electrons.
1931—Lawrence: Invention of cyclotron.
1932—Chadwick: Discovery of neutron. ✓
1932—Anderson: Discovery of positron.
1934—Fermi: Use of slow neutrons in atom smashing.
1938—Hahn: Discovery of uranium fission.
1941—Fermi: Atomic pile for generation of power.

NOBEL PRIZES

Physics

1901—W. C. Roentgen, Germany.
1902—H. A. Lorentz., and P. Zeeman, Denmark.
1903—A. H. Becquerel, France and Pierre and Marie Curie, France.
1904—Lord Rayleigh, England.
1905—Philipp Lenard, Germany.
1906—J. J. Thomson, England.
1907—A. A. Michelson, America.
1908—G. Lipman, France.

1909—G. Marconi, Italy and F. Braun, Germany.
1910—J. D. van der Waals, Holland.
1911—Prof. W. Wien, Germany.
1912—Gustaf Dalen, Sweden.
1913—Prof. H. Kamerlingh-Onnes, Denmark.
1914—Prof. M. von Laue, Germany.
1915—Prof. W. H. Bragg and W. L. Bragg, England.
1916—*No award.*
1917—C. G. Barlka, England.
1918—Max Planck, Germany.
1919—Prof. J. Starke, Germany.
1920—Prof. C. E. Guillaume, Switzerland.
1921—Dr. Albert Einstein, Germany.
1922—Niels Bohr, Denmark.
1923—R. A. Millikan, America.
1924—K. M. G. Seigbahn, Sweden.
1925—Dr. James Franck, Germany, and Dr. Gustav Hertz, Ger.
1926—Jean B. Perrin, France.
1927—Prof. Arthur Compton, America and Prof. C. T. Rees Wilson, England.
1928—Prof. O. W. Ricardson, Eng.
1929—Duc. L. V. d'Brogile, France.
1930—Sir Chandrasekhara Venkata Raman, India.
1931—*No award.*
1932—W. Heisenberg, Germany.
1933—P. A. M. Dirac, England and Erwin Schrodinger, Austria.
1934—*No award.*
1935—J. Chadwick, England.
1936—Prof. V. F. Hess, Austria and C. D. Anderson, America.
1937—C. J. Davisson, America and G. P. Thomson, England.
1938—E. Ferni, Italy.
1939—E. O. Lawrence, America.
1940-42—*No awards.*
1943—Prof. O. Stern, America.
1944—Prof. I. I. Rabi, America.
1945—W. Pauli, Switzerland.
1946—P. W. Bridgman, U.S.A.
1947—Sir E. Appleton, England.
1948—Prof. P. M. S. Blackett, Eng.
1949—Hidenki Yukawa, Japan.
1950—C. F. Powell, England.

Medicine and Physiology

1901—Emil A. von Behring, Ger.
1902—Sir Ronald Ross, England.
1903—N. R. Finsen, Denmark.
1904—Ivan P. Pavlov, Russia.
1905—Robert Koch, Germany.
1906—Profs. Ramony Cajal, Spain and Camillo Golgi, Italy.
1907—C. L. A. Laveran, France.
1908—Dr. Paul Ehrlich, Germany.
1909—T. Kocher, Germany.
1910—A. Kossel, Germany.
1911—A. Gullstrand, Sweden.
1912—Dr. A. Carrel, America.
1913—Charles Richet, France.
1914—Dr. R. Barany, Austria.
1915-18—*No award.*
1919—Dr. J. Bordet, Belgium.
1920—Prof. A. Krogh, Denmark.
1921—*No award.*
1922—Prof. A. Hill, England and Prof. Mayerhoff, Germany.
1923—Dr. F. G. Banting and Dr. J. J. R. McLeod, Canada.
1924—W. Einthoven, Holland.
1925—*No award.*
1926—Prof. J. Fibiger, Denmark.
1927—Julius W. Jaureg, Austria.
1928—Chales Nicolle, France.
1929—Sir F. G. Hopkins, England and Dr. E. Eijkmann, Holland.
1930—Karl Landsteiner, America.
1931—Otto, H. Warburg, Germany.
1932—Sir Charles Sherrington, and Prof. E. D. Adrian, Eng.
1933—T. H. Morgan, America.
1934—Drs. G. Minot, W. P. Murphy and Dr. G. H. Whipple, America.
1935—Dr. H. Spemann, Germany.
1936—Sir Henry Dale, England and Prof. Otto Loewe, Austria.
1937—Prof. Albert von Szengtyorgyi, Hungary.
1938—Prof. C. Heymans, Belgium.
1939—Prof. G. Domagk, Germany.

1940-42—*No award.*
1943—Prof. Henrik Dam, Copenhagen and Prof. Edward Doisy, U.S.A.
1944—Prof. Joseph Erlanger, and Prof. H. Gasser, U.S.A.
1945—Sir A. Fleming, Sir Howard Florey and Dr. E. B. Chain, England.
1946—H. J. Muller, U.S.A.
1947—Dr. Carl F. & Mrs. F. Cori, Czechoslovakia and Dr. Bernardo A. Housay, Brazil.
1948—Dr. Paul Muller, Switzerland.
1949—W. R. Hess, Swiss & A. C. D. F. E. Moniz, Portugal.
1950—Drs. E. C. Kendall & P. S. Hench, Switzerland.

Chemistry

1901—J. H. Hoff, Holland.
1902—Emil Fischer, Germany.
1903—S. A. Arrhenius, Sweden.
1904—Sir W. Ramsay, England.
1905—A. von Baeyer, Germany.
1906—Prof. H. Moissan, France.
1907—E. Buchner, Germany.
1908—Prof. Ernest Rutherford, Eng.
1909—Prof. W. Ostwald, Germany.
1911—Marie Curie, France.
1912—V. Grignard and P. Sabatier, France.
1913—Alfred Werner, Switzerland.
1914—T. W. Richards, England.
1915—R. Willstatter, Germany.
1916-17—*No award.*
1918—Fritz Haber, Germany.
1919—*No award.*
1920—Walther Nernst, Germany.
1921—Prof. F. Soddy, England.
1922—F. W. Aston, England.
1923—Fritz Pregl, Austria.
1924—*No award.*
1925—R. Zsigmondy, Germany.
1926—Dr. T. Svedberg, Sweden.
1927—Prof. H. Wieland, Germany.
1928—Dr. A. Windaus, Germany.
1929—Dr. A. Harden, Eng. and H. von Euler-Cheplin, Sweden.
1930—Hans Fischer, Germany.
1931—Prof. Carl Bosch and Prof. F. Bergius, Germany.
1932—Irving Langmuir, America.
1933—*No award.*
1934—Dr. H. C. Urey, America.
1935—Prof. & Mrs. F. Joliot, France.
1936—Prof. J. W. Debye, Germany.
1937—W. N. Haworth, England & Paul Karrer, Switzerland.
1938—Prof. R. Khun, Germany.*
1939—A. Butenandt, Germany* and Prof. Ruzicka, Switzerland.
1940-42—*No award.*
1943—Prof. G. Hevesy, Hun.
1944—Otto Hahn, Germany.
1945—Artturi Virtanen, Finland.
1946—James B. Sumner, W. M. Stanley & J. H. Northrop, U.S.A.
1947—Sir Robert Robinson, England.
1948—Prof. Arne Tellius, Sweden.
1949—W. F. Gianque, America.
1950—Otto Diels & Kent Adler, Germany.

Literature

1901—Rene F. A. Sully-Prudhomme, France.
1902—T. Mommsen, Germany.
1903—B. Biornson, Norway.
1904—H. F. Mistral, France and Jose Echegaray, Spain.
1905—H. Sienkiewicz, Poland.
1906—G. Carduici, Italy.
1907—Rudyard Kipling, England.
1908—R. Eucken, Germany.
1909—Selma Lagerlof, Sweden.
1910—Paul Heyse, Germany.
1911—M. Maeterlink, Belgium.
1912—G. Hauptmann, Germany.
1913—Rabindranath Tagore, India.
1914—*No award.*
1915—Romain Rolland, France.
1916—V. Heidenstam, Sweden.

---

* Declined.

1917—Karl Gjellerup and H. Pontoppidam, Denmark.
1918—*No award.*
1919—C. Spitteler, Switzerland.
1920—Knut Hamsun, Norway.
1921—Anatole France, France.
1922—William B. Yeats, Ireland.
1924—W. Reymont, Poland.
1925—G. B. Shaw, England.
1926—Grazia Deledda, Italy.
1927—Henri Bergson, France.
1928—Mme. S. Undset, Norway.
1929—Thomas Mann, Germany.
1930—Sinclair Lewis, America.
1931—Erik A. Karlfeldt, Sweden.
1932—J. Galsworthy, England.
1933—Ivan Bunin, Russia.
1934—Luigi Pirandello, Italy.
1935—*No award.*
1936—Eugene O'Neil, America.
1937—R. M. du Card, France.
1938—Pearl S. Buck, America.
1939—Emil Sillanpää, Finland.
1940-43—*No awards.*
1944—Dr. J. V. Jensen, Den.
1945—*Gabriela Mistral,* Chile.
1946—Herman Hesse, Switzerland.
1947—Andre Gide, France.
1948—T. S. Elliot, England.
1949—W. Faulkner (U.S.A.).
1950—Bertrand Russell (Eng.).

Peace

1901—Henri Dunant, Switzerland & Frederick Passy, France.
1902—Elei Ducommum and A. Gobat, Belgium.
1903—W. R. Cremer, England.
1904—The Institute of International Law, Belgium.
1905—Bertha von Suttner, Austria.
1906—T. Roosevelt, America.
1907—E. T. Moneta, Italy & Louis Renault, France.
1908—K. P. Arnoldson, Sweden & Frederik Bajer, Denmark.
1909—Baron de Constant, France and A. Beernaert, Belgium.
1910—International Permanent Peace Bureau, Switzerland.
1911—Prof. T. M. C. Asser, Holland and A. Fried, Austria.
1912—Elihu Root, America.
1913—H. la Fontaine, Belgium.
1914-16—*No award.*
1917—International Red Cross, Geneva.
1918—*No award.*
1919—Woodrow Wilson, U.S.A.
1920—Leon Bourgeois, France.
1921—K. H. Branting, Sweden and Christian L. Lange, Norway.
1923-24—*No award.*
1922—F. Nansen, Norway.
1925—Gen. Dawes, U.S.A. and Sir Austen Chamberlain, Eng.
1926—Aristide Briand, France and G. Stresemann, Germany.
1927—F. Buisson, France and Ludwig Quidde, Germany.
1928—*No award.*
1929—F. B. Kellogg, U.S.A.
1930—Dr. N. Soderblom, Sweden.
1931—Miss Jane Addams & Dr. N. M. Butler, America.
1932—*No award.*
1933—Norman Angell, England.
1934—A. Henderson, England.
1935—Carl von Ossietosky, Ger.
1936—C. S. Lamas, Argentine.
1937—Viscount Cecil, England.
1938—Nansen International Office for Refugees, Geneva.
1939-43—*No awards.*
1944—International Committee of Red Cross, Switzerland.
1945—Cordell Hull, U.S.A.
1946—Family G. Balch & John Mott, U.S.A.
1947—American Friends Service Committee (U.S.A.) and Br. Society of Friends Service Council (England).
1948—*No award.*
1949—Lord Boyd-Orr, England.

BIRTH-STONES

January	.. Garnet
February	.. Amethyst
August	.. Peridot or Sardonyz

March	Bloodstone	September	Sapphire
April	Diamond	October	Opal or Tourmaline
May	Emerald		
June	Pearl or moonstone	November	Topaz
July	Ruby	December	Turquoise or Lapislazuli

INDIAN STONES AGAINST PLANETARY ACTIONS

Sun (*Ravi*)	Ruby	Saturn (*Shani*)	Sapphire
Mars (*Mangal*)	Coral	Ascending Node (*Rahoo*)	Gomed
Moon (*Chandra*)	Pearl	Descending Node (*Ketoo*)	Cats's eye
Mercury (*Budh*)	Emerald		
Jupiter (*Brihaspati*)	Pokraj		
Venus (*Sukra*)	Diamond		

FAMOUS DIAMONDS

	Carats		*Carats*
Cullinan (1905)	3,106	Tiffany	969
Kohinoor	$106^1/_{16}$	Victoria (now Nizam)	457½
Orlov	194¾	Star of S. Africa	350½
Florentine	$133^1/_6$	Hope	$45^3/_5$
Regent or Pit	137⅞		

THERMOMETERS

	Centigrade	*Reaumer*	*Fahrenheit*
Freezing point	0°	0°	32°
Boiling point	100°	80°	212°
Blood heat	37°	29·6°	98·6°

LENGTH OF LIFE

Mammals	*Years*	*Amphibian*	*Years*	*Birds*	*Years*
Elephant	60	Frog	15	Goose (domestic)	65
Rhinoceros	50	Toad	15	Parrot	54
Hippopotamus	40			Pelican	52
Bear	35	*Reptiles*		Eagle (golden)	46
Camel	28			Crane	43
Leopard	21	Tortoise	100	Ostrich	40
Horse	20	Turtle	42	Crow	30
Lion	20	Alligator	40	Swan	25
Tiger	20	Crocodile	40	Heron	22
Cow	20	Python	40	Canary	20
Monkey	15	Chameleon	3		
Squirrel	15			*Fish*	*Years*
Goat	15			Pike	70
Cat	15			Carp	50
Giraffe	14			Eel	10
Sheep	13			Goldfish	10
Ox	13			Salmon	4-6
Dog	10				
Hare	6				
Mouse	2-6				

ANIMAL AND BIRD RECORDS

Tallest Animal—Giraffe.
Largest land animal—Elephant.
Fastest Bird—Swift, sometimes flies 200 miles per hour.
Largest quadruped of the dog family—Wolf.
Largest animal of the cat family—Lion.
Largest of man-like or anthropoid apes—Gorilla.
Largest of the sea birds—Albatross.
Fastest animal—Cheetah.
Largest sea animal—Blue Whale.
Smallest Bird—Humming bird.
Longest lived creature—Blue Whale (500 years).
Largest of the flat fish—Halibut.
Longest neck—Giraffe.
Largest living bird—Ostrich.
Heaviest bird—Condor.

SPEED OF BIRDS

	m.p.h.		*m.p.h.*
Golden Eagle	120	Quail	48-58
Ducks	55-70	Crow (top speed)	60
Geese	50-60	Crow (normal speed)	25-30
Pheasant	60	Ruby-throated humming bird	55

LONGEVITY OF TREES

	Years		*Years*
Larch tree	800	American Redwood tree	4,000
Fir tree	1,200	Baobab tree	4,000

BIG PARKS

	Acres		*Acres*
Hyde Park (London)	400	Prater (Vienna)	2,300
Phoenix Park (Dublin)	1,760	Maidan (Calcutta)	1,000
		Bois de Boulogne (Paris)	2,160

GESTATION AND INCUBATION PERIODS

	Days (Average)		*Days (Average)*
Bear	180—240	Ass	365—385
Cow	280	Cat	52—63
Dear	140—264	Dog	55—70
Elephant	540—660	Fox	51—60
Ewe	146—161	Guinea pigs	63—71
Giraffe	450	Goat	135—163
Mare	307—419	Lion	105—111
Monkey	104—179	Rabbit	27—36
Whale	276—365	Rat	21—30
Sow	101—130	Wolf	63
Hippopotamus	220—240	Woman	280
Kangaroo	39	Chicken	21
Seal	245—350	Duck	21—35
Squirrel	28—35	Goose	28—30
Turkey	28	Pigeon	18

COMPARATIVE SPEEDS

In the Air	*m.p.h.*	*In the water*	*m.p.h.*	*On Land*	*m.p.h.*
Vulture	89	Swimmer	4·01	Man	21·7
Homing pigeon	62	Sail-boat	30	Racing horse	42·3
Swallow	110	Passenger liner	35	Jack Rabbit	45
Golden Eagle	120	Light Cruiser	50	Gazelle	60
Duck Hawk	180	Carp	0·9	White-tailed deer	49
Swift	60	Pike	10	Skater	25·3
Arrow	200	Flying fish	35	Turtle	·01
Fighter plane (over)	400	Torpedo boat	60	Speed test automobile	394
Dive bomber	725	Outboard motor boat	74·39	Steamlined train	127·2
Transport plane	195	Racing speed boat	141·74	Grey-hound	36
Pitched baseball	98			Cheetah	70
Bullet—2000 ft. per second.					

BIG WORLD FAIRS

	Days Opened	*Visitors*		*Days Opened*	*Visitors*
London (1851)	141	6,039,195	Paris (1900)		39,000,000
Paris (1855)	200	5,162,330	San Francisco (1915)	288	18,871,957
London (1862)	171	6,211,103	Wembley (1924)	165	27,900,000
Paris (1867)	210	10,000,000	Chicago (1933-4)	329	38,625,564
Vienna (1873)	186	7,254,687	New York (1939-40)	340	44,932,534
Paris (1878)	194	16,032,725			
Chicago (1893)	179	27,529,400			

GREATEST HEIGHT AND GREATEST DEPTH

	Ft.		*Ft.*
Highest point reached by passenger balloon	72,395	Greatest submarine depth	600
Highest point reached by airplane	56,046	Deepest dive by men in benthoscope	4,500
Mount Everest	29,001	Deepest mine more than	9,000
Greatest diver depth	420	Deepest oil well over	16,000
		Deepest ocean sounding	6·7 miles

NATIONAL AND STATE FLOWERS

China	Narcissus.	Spain	Pomegranate.
England	Rose.	U. S. A.	Golden rod.
France	Fleur-de-lis.	Persia	Rose.
Germany	Cornflower.	Wales	Leek or Daffodils.
Greece	Laurel.	Prussia	Linden.
India	Lotus.	Canada	Maple leaf.
Ireland	Shamrock.	Egypt	Lotus.
Italy	Lily.	Holland	Tulip.
Mexico	Cactus.	Australia	Golden Wattle.
Switzerland	Edelweiss.	Denmark	Forget-me-not.
Japan	Chrysanthemum.	Spain	Red carnation.
Scotland	Thistle.		

RAILWAYS RECORDS

World's longest non-stop run	*'Flying Scotsman'*—King's Cross to Edinburgh, 392½ miles.
World's largest escalator ..	Leicester Square Under ground Station: 161 ft. long with rise of 80 ft. 6 in.
World's largest covered goods station	Bristol (Temple Meads).
World's busiest Ry. Junction	Clapham (Eng.) Junction—2,500 trains in every 24 hours.
Shortest Private Railway ..	Railway of the Pope in Vatican City; only 1/3 of a mile.
Shortest Public Railway ..	Easingwold Ry. 2½ miles; England.
Largest Underground Station	In Berlin—opened in 1930 with 9 separate entrances and 8 moving stair cases.
Longest Railway Tunnel ..	Simplon (Switzerland-Italy) 12 m. 560 ft.
Longest Railway Bridge ..	Lower Zambesi (Africa), 12,064 ft.
Longest Stretch of straight railway	Trans-continental Rly. of Australia is a dead straight of 328 miles across Nullarbar plain.
Highest Railway	Antofagasta and Bolivia Railway attains altitudes of 15,843 ft.
Fastest Narrow Gange Train	In Java, State Rly. 49·08 miles per hour.
World's most northernly Rly.	At King's Bog, Spitsbergen, 750 miles from North Pole.
Longest Railway platform ..	Sonepur (O. T. Rly.), India 2,415 ft.
World's highest Rly. bridge	Fades Viaduct (France); 434 ft.
Highest Ry. mileage ..	U.S.A.—227,679 miles.

RAILWAY GAUGES

1. Great Britain, Canada, U. S. A., Mexico, Peru, Egypt, China, Norway, Sweden, Denmark	4 ft. 8½ in.
2. Australia, Belgium, France, Germany, Holland, Italy, Spain and Switzerland	4 ft. 0 in.
3. Ireland	5 ft. 3 in.
4. India, Argentina and Chile	5 ft. 6 in.
5. Spain, Portugal	5 ft. 5¼ in.
6. New Zealand, Nigeria, S. Africa, Japan and Sudan ..	3 ft. 6 in.
7. Eastern Countries of Africa and Belgium Congo ..	3 ft. 3⅜ in.

SIZE OF PRINTING PAPERS

Foolscap	16½″×13½″	Medium	23″ ×18″
Large Post	16½″×21″	Royal	25″ ×20″
Double Foolscap ..	27″ ×17″	Super Royal ..	27½″×20½″
Double Crown ..	30″ ×20″	Elephant ..	28″ ×23″
Demy	18″ ×22″	Imperial	30″ ×22″
D. Demy	22½″×35″		

HIGHEST RAILWAY BRIDGES

	ft.		*ft.*
Fades Viaduct (France) ..	434	Loa (Bolivia)	336
Victoria Falls (South Africa)	420	Assopos (Greece)	330
Gurabid (France)	400	Pecos (S. Pacific)	321
Viain (France)	377	Goktiek (Burma)	320

LONGEST RAILWAY BRIDGES

	Feet		*Feet*
Lower Zambesi (Africa) ..	12,065	Forth (Scotland)	8,300
Tay (Scotland)	11,652	Rio Saldo (Argentina) ..	7,703
Sone (India)	10,052	Mahanadi (India) ..	6,912
Godavari (India) ..	9,096		

FREEZING, FUSING AND BOILING POINTS

Degrees of Fahrenheit.		*Degrees of Fahrenheit.*	
1,996	Copper melts.	145	White of an egg begins to coagulate.
1,947	Gold melts.	122	Mutton suet melts.
773	Zinc melts.	115	Pure tallow melts.
644	Mercury boils.	112	Spermaceti and stearim of lard melts.
617	Pure lead melts.	98·4	Temperature of the blood.
442	Tin melts.	95	Ether boils, carbolic acid crystals become oily liquid.
1,760	Silver fuses.	32	Water freezes.
315	Oil Turpentine boils.	5	Cold produced by snow —2 parts, salt—1 part.
212	Water begins to boils.	—39	Mercury freezes.
2,730	Iron (pure).		
2,480	Steel.		
176	Rectified spirit boils.		
—180	Alcohol freezes.		
95	Alcohol boils.		
151	Beeswax melts.		

SOME WORLD LEADERS

China—Second in size and first in population among the countries in the world.

Brazil—leads the world in the production of coffee.

Chili—is the only country in the world where natural nitrate is found and has the world's largest copper reserve.

Equador—is the world's chief source light strong balsa wood.

Italy—is ordinarily the world's largest producer of mercury.

Japan—is the world's largest producer of natural silk.

Mexico—outranks all other countries of the world in silver production.

Portugal—is one of the world's leading producers of cork.

Switzerland—draws the heaviest and most profitable tourist trade in the world.

WORLD POPULATION

Jewish Population of the World (1949)

Europe	4,300,000	Africa	602,000
America	5,500,000	Oceania	602,000
Asia	950,000		
		Total	11,385,200

Arab Population of the World

Arabia, North Africa, Morocco, Tunesia, Levant, Iraq	44,790,000

U. S. Population

All classes	131,669,275	Foreign born	11,419,138
White	118,214,870	Negro	12,865,518
Native	106,795,732	Other races	588,887

Largest Populated Cities

London	8,390,941	Buenos Aires	3,000,371
New York	7,835,099	Paris	2,800,000
Shanghai	4,630,385	Calcutta	2,549,790
Tokio	4,174,505	Rio De Jenario	2,129,648
Moscow	4,137,018	Cairo	2,100,506
Berlin	3,729,300	Philadelphia	2,064,749
Chicago	3,606,436	Mexico City	1,972,351
Leningrad	3,191,304	Los Angeles	1,957,692

Marriage Rate

(Number of marriages per 1,000 inhabitants, 1950)

Australia	9·2	Italy	7·5
Canada	9·0	Netherlands	8·2
Ceylon	6·8	Sweden	7·6
France	8·0	Switzerland	8·0
W. Germany	10·6	U.K.	8·0
Ireland	5·8	U.S.A.	11·2

High Population Densities (Per square mile)

Monaco	35,593·2	West Bengal	839	Germany	541·1
Vatican City	2,000	Belgium	731·9	India	382·4
Trieste	1,177·5	Japan	562·2	Italy	395·8
Netherlands	801·9	U. Kingdom	541·1	Lebanon	358·7

World Population

[Source: F.A.O. Year Book 1949]

Europe	387,396,000	Asia	1,248,461,000
U.S.S.R.	197,000,000	Africa	193,359,000
North & Central America	210,284,000	Oceania	12,235,000
South America	105,393,000	World Total	2,354,128,000

POPULATION OF LEADING COUNTRIES

[Source: U.N. Monthly Bulletin of Statistics, July, 1951]

In thousands

Europe

Albania	1,175
Austria	7,000
Belgium	8,639
Bulgaria	7,160
Czechoslovakia	12,463
Denmark	4,271
Finland	4,064
France	41,550
Germany	47,607
Greece	7,960
Hungary	9,205
Iceland	140
Ireland	3,006
Italy	46,272
Luxemburg	297
Netherlands	10,114
Norway	3,265
Poland	24,977
Portugal	8,618
Rumania	15,873
Spain	28,287
Sweden	7,017
Switzerland	4,700
Trieste	298
U.K.	50,618
Yugoslavia	16,260

North and Central America

Canada	13,845
Cuba	5,348
Costa Rica	794
Dominician Republic	2,121
El Salvadar	1,858
Guatemala	2,787
Honduras	1,539
Mexico	25,581
Nicaragua	1,053
Panama	801
Puerto Rico	2,211
United States	151,689

South America

Argentina	17,196
Bolivia	3,990
Brazil	52,124
Chile	5,809
Colombia	11,260
Equador	3,097
Paraguay	1,406
Peru	8,405
Uruguay	2,353
Venezuela	4,986

Asia

Ceylon	7,539
China	463,493
India	342,114
Indonesia	72,000
Iraq	4,800
Israel	1,094
Japan	83,300
Korea	29,291
Philippines	19,557
Syria	3,227
Thailand	18,313
Turkey	20,935

Africa

Tanganyika	7,514
Nyasaland	2,314
Kenya	5,454
Egypt	20,045
Union of South Africa	12,320
Uganda	5,050

Oceania

Australia	7,000
New Zealand	1,920

U.S.S.R.

U.S.S.R. (1946)	193,000

CRUDE BIRTH AND DEATH RATES

(Per 1,000 inhabitants)

Births, 1950

Australia	23·3
Canada	26·5
Ceylon	40·3
France	20·7
West Germany	16·2
India	25·9
Japan	28·5
Netherlands	22·7
Norway	19·3
Portugal	38·6
Spain	19·9
Sweden	16·3
U.K.	16·1
U.S.A.	23·4
Australia	9·6

Deaths, 1950

Canada	9·0
Ceylon	12·6
France	12·8
West Germany	10·4
India	16·5
Japan	11·0
Netherlands	7·5
Norway	8·9
Portugal	11·9
Spain	10·8
Sweden	10·0
U.K.	11·7
U.S.A.	9·6

WORLD GAZETTEER

(*A BRIEF GUIDE TO THE COUNTRIES OF THE WORLD*)

Abyssinia—An Empire in East Africa, official name *Ethiopia.* The Emperor directly controls the government, though there now is a Council of Ministers, a Senate and a Chamber of Deputies. All members are appointed by the monarch. The actual form of government is thus the personal rule of the Emperor. Capital—*Adis Ababa.*

Afghanistan—A mountainous Moslem kingdom lying between Pakistan, Iran and Soviet Union, area 270,000 sq. m. Pop. about 12,000,000. The Government is constitutional monarchy. Legislative power is vested in a parliament consisting of the King, a Senate of 40 members and a National Assembly of 120 elected members. The main routes to Pakistan passes through the mōuntains, the chief being Khyber from Kabul and Bólan from Kandahar. The country is mountainous and undeveloped. It can be reached only by a few high passes. There is no railway in Afganistan. Capital—*Kabul.*

Albania—A mountainous Baltic republic in southern Europe bounded by Yugoslavia, Greece and Adriatic Sea, was incorporated with Italy in 1939 but now a free republic. It has a typical Soviet government. The supreme power is vested in the popularly elected national assembly, to which the Cabinet, headed by the premier is responsible. Area 10,000 sq. m. Pop. 1,175,000. Capital—*Tirana.*

Anglo-Egyptian Sudan—is bounded by Libya and Egypt; It is a condominium which was established in 1899. The status was reaffirmed in the Anglo-Egyptian treaty of 1936. Area—969,000 sq. m. Pop. 7,919,000. Capital—*Khartoum.*

Andorra—Republic of Europe in the Pyrenees mountains under the joint suzerainty of France and Spanish Bishop of Urgel; area 175 sq. m. Pop. 5,000. Capital—*Andorra.*

Arabia—A peninsula in south-west Asia inhabited by Arabs, was a single political unit, now comprises the following States—Aden Colony (British), Aden Protectorate, Bahrein Islands (Sultanate), Kuwait (Sheikdom), Oman and Masqat (Sultanate), Qatar (Sheikdom), Saudi Arabia, Trucial Coast (Sheikdoms), Yemen (Kingdom).

Saudi-Arabia—is the most important state of the peninsula. It consists of Hejaz, Nejd and Asir. *Sheikdom of Kuwait* on the shore of the Persian Gulf is an independent state. *Sultanate of Oman and Masqat* occupies the mountainous southeastern part of the peninsula. *Qartar* occupies the whole of the Qatar peninsula in the Persian Gulf. It is ruled under British protection by a Sheik. *Sheikdoms of Trucial Coast* extend along part of the Gulf of Oman and southern coast of Persian Gulf. It is ruled by seven semi-independent Sheiks. *Kingdom of Yemen* is an independent state occupying the southwestern extremity of the peninsula. *Aden* is a British colony and protectorate situated on the volçanic southern tip of the Arabian peninsula along the Gulf of Aden. *Bahrein Islands*—These islands form an archipelago off Arabia's east coast and are nominally an independent Sheikdom but are actually a protectorate of Great Britain. The islands are important for their oil, pearl fisheries and strategic position.

Argentina—Second largest S. American Republic; Government is Federal Union of fourteen provinces and nine territories and one federal district. Argentina is regarded as the most important nation in Latin America besides Brazil. Economically it is the most developed of all; it has 43 p.c. of the foreign trade of South America, 54 p.c. of all South American railroads and 55 p.c. of all automobiles. Argentina depends largely on agriculture, in which 70 p.c. of the population are engaged and is one of the world's leading exporters of wheat, maize and beef. Area 1,079,965 sq. m. Pop. 16,300,000. Capital—*Buenos Aires.*

Australia—Federal Commonwealth of British Empire; Political divisions are—Western Australia, Queensland, Northern Territory, South Australia, New South Wales, Victoria and Tasmania. Australia is primarily an agricultural country, one of the world's greatest producers of wheat and wool, but industrialisation has been extensive. Area 3,000,000 sq. m. Pop. 757,000. Capital—*Canberra.*

Austria—is a country of Central Europe and was a part of Greater Germany but since World War II has been divided into four national zones as is the city of Vienna and inter-allied governing authority of Vienna consist of four participating nations—U.S.A., France, Britain, U.S.S.R. It is now a federal republic. Area 32,369 sq. m. Pop. 6,953,000. Capital—*Vienna.*

Belgium—North-west European Kingdom. Government is constitutional hereditary monarchy. Belgium is the most densely populated country in Europe. Belgium is also a great colonial power; she possesses Belgian Congo in Central Africa which is one of the world's largest copper producers, the greatest producer of radium and also producers of gold and diamond. Capital—*Brussels.*

Bhutan—Bhutan is a small semi-independent state lying on the south-east slope of the Himalayas, bordered on the north by Tibet and on the east, south and west by the Indian Union. The inhabitants are Mongolians and follow Buddhism. Agriculture is the chief industry. The country is governed by the hereditary king. Indian Government pays a subsidy and controls her foreign affairs and defence. Area 18,000 sq. m. (approx.). Pop. 300,000. Capital—*Punakha.*

Bolivia—South American Republic located in the west central portion of the South America; area 416,050 sq. m. Pop. 3,922,000. Capital—*La Paz.*

Brazil—The largest south American Republic and occupies nearly half of South America. In world comparison, it ranks after U.S.S.R., China and Canada. Brazil leads the world in the production of coffee and castor beans and ranks second in cacao. Area 3,291,416 sq. m. Pop. 48,450,000. Capital—*Rio de Janerio.*

Bulgaria—Balkan Republic; The constitution of 1947 modelled after that of Soviet Union provides that the unicameral National Assembly is the supreme organ of the State; area 42,848 sq. m. Pop. 7,100,000. Capital—*Sofia.*

Burma—A free republic since 4th Jan., 1948 outside the British Commonwealth by a treaty signed in London, on Oct. 17, 1947. The Constitution adopted on Sept. 24, 1947 provides for a government headed by the president, who is elected by the two houses of Parliament. The President appoints premier on nomination by the Chamber of Deputies; the cabinet must enjoy the confidence of the Chamber of Deputies. Four frontier areas, the Shan, Kachin, Karenni States and the Chin special division are the constituent parts of the Union but enjoy some autonomy. Area 261,610 sq. m. Pop. 17,000,000. Capital—*Rangoon.*

Canada—Federal Union and a self-governing dominion of the British Empire with the second continuous land area in the world, stretching across the northern part of the north American continent. Canada is one of the world's leading sources of wheat, enormously rich in forests; also ores, metals, oils and other raw materials are produced in quantities. Canada is the principal source of nickel in the world. Of special interest is the uranium ore mined in the northern Canada, one of the only two places so far known in the world where raw material for atomic energy can be mined easily.

Ceylon—The island of Ceylon lies in the Indian Ocean, 12 miles south-east of the southern tip of India. It is now a self-governing Dominion of British Commonwealth from 1948. Under the new Constitution, Ceylon's government is headed by the Crown-appointed Governor-General., who is advised by a Council of Ministers headed by a Prime Minister. The bicameral parliament consists of a House of Representatives and a Senate. Area 25,322 sq. m. Pop. 7,095,000. Capital—*Colombo.*

Chile—A democratic State lies on the west coast of South America; area 286,322 sq. m. Pop. 5,621,000. World's largest copper reserve is in Chile. Capital—*Santiago.*

China—Republic of Asia since 1912. It is second in size and first in population among the countries in the world. Occupies a vast area in south-east Asia; most densely populated country in the world. Soviet-type of government has been established by the communists in 1949 who control whole of China except Formosa. The Constitution of the People's Republic was accepted in 1949. It established People's Government Council as the highest organ of the state which is headed by a chairman and has legislative functions. Area 4,480,000 sq. m. Pop. (China proper) 463,493,000.

Columbia—South American Republic located in north-west South America; area 440,000 sq. m. Pop. 10,777,000. Capital—*Bogota.*

Costa Rica—Central American Republic; area 23,000 sq. m. Pop. 813,000. Capital—*San Jose.*

Cuba—The 'Pearl of Antilles' is the largest island in the West Indies; It is the second largest cane sugar producer in the world; area 44,164 sq. m Pop. 5,162,000. Capital—*Havana.*

Cyrenaica—is situated in the former Italian Colony of Libya. It gained independence on Sept. 16, 1949 due to its siding with the British during World War II.

Czechoslovakia—Republic of Central Europe that rose after the World War I, comprising area formerly belonging to Austria-Hungary. It has a Soviet-type constitution promulgated on June 8, 1948. Czechoslovakia possesses one of the richest territories in Europe, both in the matter of natural resources and industrial developments. Area 19,300 sq. m. Pop. 12,339,000. Capital—*Prague.*

Danzig—Free city of; became a free city under the League of Nations; was occupied by Germany in the war against Poland (1939); area 754 sq. m. Pop. 497,550.

Denmark—Kingdom of north Europe; The constitution is a constitutional hereditary monarchy. Danish dairy products are world famous and the country in normal times exports more butter than any in the world; area 16,570 sq. m. Pop. 4,190,000. Capital—*Copenhagen.*

Dominician Republic—The Republic (formerly San Domingo) occupies the eastern two-thirds of the island which Columbus named La Espanola (now Hispaniola) when he discovered it on his first voyage in 1492, lies east of Cuba between Atlantic Ocean and the Caribbean Sea; area 19,300 sq. m. Pop. 2,214,000. Capital—*Cuidad Trujilo.*

Eire—Is now sovereign independent republic from 1949. The Government of Eire is bicameral with a President elected directly by the people for a term of seven years, a House of Representatives called Dail Eireann and a Senate; area 26,601. Pop. 2,997,000. Capital—*Dublin.*

Ecuador—Republic of South America in the Pacific coast of South America; area 175,830 sq. m. Pop. 3,440,000. Capital—*Quito.*

Egypt—An independent Kingdom of N.-E. Africa; Egypt is a constitutional hereditary monarchy; the Constitution provides for a Parliament composed of a Senate and a Chamber of Deputies; area 383,000 sq. m. Pop. 19,528,000. Capital—*Cairo.*

Finland—Republic in northern Europe with coastline on Baltic; fringed by islands and dotted with lakes; was proclaimed an independent state in July 29, 1917 and a republic on October 5 of the same year; area 134,324 sq. m. Pop. 3,958,000. Capital—*Helsinki.*

France—A new constitution was passed in 1946 establishing Fourth Republic; France is now a secular, democratic and social republic. The dominant power in the new republic is the National Assembly whose members are elected by universal direct suffrage. There is also a Council of the Republic, subordinate to the Assembly. The two Houses together elect the President of the Republic for a 7-year term but his choice of premier and the latter's choice of cabinet ministers require Assembly ratification. Area 212,741 sq. m. Pop. 41,500,000. Capital—*Paris.*

Germany—The *Federal Republic of Germany* came into formal existence on September 21, 1949 when Allied High Commission transferred to it the administration of the U. S. British and French Zones of occupation of Germany. On may 8, 1949 the German Constituent Assembly at Bonn approved the constitution for Western Germany. The supreme authority is vested in the governments of the U.S.A., United Kingdom and France and is exercised through the Allied High Commission. The powers of the Commission is defined in the Occupation Statute of 1949. Subject to the provisions of the Statute, the republic has full legislative, executive and judicial powers in accordance with the basic law or Constitution. Any law of the republic is however subject to veto by the Commission. Foreign policy, disarmament and demilitarization, Ruher control, reparation, decartelization and security of Allied occupation forces are reserved in the hands of the Commission. The Constitution provides for a federal form of government headed by a president elected every five years by a federal convention. The actual excutive power is in the hands of the cabinet.

The German Democratic Republic comprises the Soviet Zone of occupation of Germany. It was proclaimed on Act 7, 1949 with its seat at Berlin on the basis of a constitution adopted on May 30, 1949. The constitution is of Soviet nature and is under the complete control of the Communists. Soviet government supervision is exercised by the Soviet Control Commission.

Berlin—the capital of the prewar Germany is occupied by the forces of U. S. the U. K., France, U.S.S.R., each having its own sector of occupation. The supreme authority in Western Berlin is exercised by the Allied High Commission known as Kommandatura. Supreme authority of the eastern portion of Berlin is exercised by Soviet Control Commission.

Greece—is located on Balkan peninsula in south-western Europe; Greece is a constitutional hereditary monarchy. Nominal executive power is vested in the king but the government is administered by the Council of Ministers, headed by the Premier who must enjoy the Assembly's confidence. Area 50,000 sq. m. Pop. 7,780,000. Capital—*Athens.*

Guatemala—Republic of Central America; area 42,353 sq. m. Pop. 3,717,000. Capital—*Guatemala City.*

Haiti—It occupies the western third of the island known as Hispaniola, the second largest of the greater Antilles. It is the only Negro republic in the Western Hemisphere; area 10,714 sq. m. Pop. 3,700,000. Capital—*Port au Prince.*

Honduras—Republic of Central America; area 59,145 sq. m. Pop. 1,325,896. Capital—*Tegucigalpa.*

Hungary—European Republic formed out of Austro-Hungary; it is the abode of the Magyars; The Soviet type of constitution was adopted by the Parliament on August 18, 1949 which declared Hungary to be a 'people's republic'. Area 35,911 sq. m. Pop. 9,165,000. Capital—*Budapest.*

Iceland—Island in the North-Atlantic Ocean, now republic; it is close to the Arctic circle in the North Atlantic; area 40,479. Pop. 137,000. Capital—*Reykjavik.*

India—It is now self-governing independent Republic from 15th August, 1947. The dominion is one of the largest and richest nations in the world. Area 1,217,000 sq. m. Pop. 342,114,000. Capital—*New Delhi.*

Indo-China—French dependency in South-east Asia consisting of five parts—Cochin-china, Annam, Cambodia, Tonking and Laos. The whole territory is governed by a Governor-General. Area 281,000 sq. m. Pop. 27,030,000.

Indonesia—is comprised of East Indies Islands of Java, Sumatra, Central and Southern Borneo, Celebes, Moluccas and Madura. Under the statute of the Union, the Netherlands and Indonesia both are sovereign independent nations joined together in the person of the Queen of the Netherlands. Sovereignty was transferred to the Indonesian government on 27th Dec. 1949. Area 218,365 sq. m. Pop. 76,360,000. Capital—*Jogjakarta.*

Iran—Kingdom of Western Asia, also known as Persia; Iran is a constitutional monarchy. Executive power is exercised by a cabinet headed by the prime minister; area 634,413 sq. m. Pop. 17,000,000. Capital—*Teheran.*

Israel—The Jewish State in Palestine was established in 1948 in fulfilment of the aspirations of Zionism and following a decision of U.N. Assembly on the partition of Palestine between Jews and Arabs. Israel is a democratic State. It occupies the major portion of Palestine. It lies on the western edge of Asia bodering on the Mediterranean Sea. Area 5,000 sq. m. Pop. 713,000. Capital—*Tel Aviv.*

Iraq—Arab Kingdom in the Middle East; formerly known as Mesopotamia; now one of the states lying between Arabia and Persia; created as a result of World War I; area 175,000 sq. m. Pop. 4,950,000. Capital—*Bagdad.*

Italy—Republic of Europe, stretching from the Alps south-east into Mediterranean with the islands of Sicily, Sardania, Elba and 70 smaller ones; under the 1947 constitution Italy is "democratic Republic founded on labour". The President is elected for seven years by parliament in joint session with regional delegates. The Cabinet headed by the premier and nominated by the president must enjoy the confidence of parliament. Area 116,224 sq. m. Pop. 45,706,000. Capital—*Rome.*

Japan—Island Empire of Asia; is situated in the North Pacific Ocean off the coast of China and Siberia; area 146,690 sq. m. Pop. 80,171,000. It was under the control of Allied power upto 1951. A new constitution was promulgated by Japanese government in March 6, 1947, which placed "sovereignty squarely in the hands of people. It strips the Emperor of all pretension of 'divinity'. The executive power is vested in the cabinet headed by the premier and collectively responsible to the Diet. Japanese peace treaty was signed by the Allied nations at San Francisco in 1951 when the military occupation ceased, though U.S. kept some sort of influence. Capital—*Tokio.*

Jordan (Hashemite Kingdom of)—was formerly known as Trans-Jordan, is now an independent state in western Asia. It was previously an Arab State within the Palestine Mandate. Jordan was set up within Palestine Mandate in 1922 but gained independence in 1946 when Great Britain and Jordan signed a mutual assistance treaty. Area 34,740 sq. m. Pop. 400,000. Capital—*Amman.*

Korea—East Asiatic country on a peninsula between Manchuria and Japan. Free and Independent Korean Republic was assured by the Yalta and Potsdom Agreements. But after the surrender of Japan, Korea was artificially divided by a line along the 38th parallel between U.S.A. and U.S.S.R. A new republic was formed in South Korea by U.S.A. Russia on the other hand set up People's Republic in North Korea. Pop. 28,200,000. Capital—*Soul.*

Liberia—Independent Negro Republic of West Africa on the Guinea Coast; It is Africa's only republic; area 43,000 sq. m. Pop. 1,600,000. Capital—*Monrovia.*

Leichtenstein—65 sq. m. Pop. 11,000 is principality between Austria and Switzerland. Capital—*Vaduz.*

Luxemberg, Grand Duchy of—Luxemberg is a European Grand Duchy situated between Germany, Belgium and France. It was given its present rank as principality by the Congress of Vienna in 1815. Area 999 sq. m. Pop. 292,000. Capital—*Luxemburg.*

Lebanon—Is now an independent State. It is now situated in the Levant occupying a strip along the Mediterranean littoral in south-west geographical Syria; area 3,600 sq. m. Pop. 1,280,000. Capital—*Beirut.*

Mongolian People's Republic—is also known as Outer Mongolia. The Government is similar to Soviet system. Under the Chinese-Russian Treaty of 1945, China agreed to give up Outer Mongolia provided that a plebicite on independence be held first. The subsequent vote was announced as 483,291 to 0 in favour of independence. On Jan. 5, 1946 China recognised Outer Mongolia's independence. The country is allied to Russia and for all practical purposes a Russian protectorate. Area about 1,500,000 sq. m. Pop. about 550,000. Capital—*Ulan Bator Khoto.*

Mexico—A Federal republic of 28 states in N. and S. America; area 760,000 sq. m. Pop. 23,876,000. Mexico has a great mineral wealth and produces petroleum, silver, gold copper, lead, quicksilver, iron and coal. She is the world leader for the production of silver, sisal, hemp and chicle for chewing gum. Capital—*Mexico City.*

Monaco—A tiny independent principality in south of France; is located on the Mediterranean with land frontiers joining France at every point; area 7·99 sq. m. Pop. 21,000. Capital—*Monaco.*

Morocco—A country of North Africa. The Empire theoretically is an absolute monarchy, but the country is divided into three zones—the *French,* the *Spanish* and the *neutral Tangier area.* The country is under French protectorate which encompasses the whole of Morocco from Algerian frontier to the Atlantic Ocean and from Sahara Desert in the south to the boundary of the Spanish zone in the north. The Spanish zone is the northern strip; area 172,104 sq. m. Pop. 9,082,900. Capital—*Rabat.*

Malaya, Federation of—Before Japanese invasion in 1941-42, part of the Malaya Peninsula and number of adjacent islands were known as Strait Settlement; It was a British Crown Colony. After Malaya became free from Japanese control, the people made demands for complete independence. So new treaty signed on January 21, 1948 establishing Malaya Federation consisting of nine Malaya States and Settlements of Penang and Malacca. This Constitution excludes Singapur which remains a British Crown Colony. The Malaya Federation has a federal executive and a federal council presided over by the High Commissioner. The British influence in the affairs of the nine States is limited to defence and foreign affairs. Rubber area is devoted to the growing of rubber. Pop. 5,000,000. Capital—*Kuala Lumpur.*

Nepal—A land-locked country, lying between India and Tibet. Nepal has two great distinctions of containing Mt. Everest, 29,002 (ft.) the tallest mountain peak of the world and some of the toughest fighting men in the world—Gurkhas. After a revolution in 1950, a representative government has been established in 1950 with King as constitutional head. The traditional supreme authority of the Prime Minister no longer exists. Area 54,000 sq. m. Pop. 6,910,000. Capital—*Katmandu.*

Netherlands—Kingdom in North western Europe; area 13,514 sq. m. Pop. 10,026,748. It is a constitutional and hereditary monarchy. Executive power is vested exclusively in the sovereign while the legislative power vests with the sovereign and the States-General. Capital—*Amsterdom.*

Nicaragua—Central American Republic lying between the Caribbean Sea and Pacific Ocean; area 60,000 sq. m. Pop. 1,160,000. Capital—*Managua.*

Norway—Kingdom of north Europe; Norway is a constitutional and hereditary monarchy with succession in direct male line. In the North Cape area is the phenomenon known as *midnight sun.* Area 125,193 sq. m. Pop. 3,249,000. Capital—*Oslo.*

Pakistan—A new Muslim State within Indian Sub-Continent with dominion status from 14th August, 1947, consisting of East Bengal, Western Punjab, Sind, N.W.F. Province and Baluchistan. Area 316,000. Pop. 73,321,000. Capital—*Karachi.*

Palestine—Formerly belonging to Turkey, was administered by Great Britain under mandate from League of Nations which she had relinquished in 1948; After the termination of British mandate, the provisional government of Israel became the defacto authority in areas of Palestine occupied by the Israeli forces—somewhat over half the total area. In 1949, the provisional regime gave way to a regularly constituted government set up under the constitution adopted by a popularly elected Constituent Assembly. In April, 1950, Arab-held eastern and central Palestine including old city of Jerusalem was incorporated into Jordan by action of the Jordani parliament. Area 10,159 sq. m. Pop. 1,912,110. Capital—*Jerusalem.*

Panama, Republic of—It occupies the entire Isthmus of that name connecting North and South America. Panama Canal is the country's big economic asset. Area 28,775 sq. m. Pop. 746,000. Capital—*Panama.*

Paraguay, Republic of—South American Republic; Since the adoption of the 1940 constitution, Paraguay is a semi-authoritarian republic Area—154,165 sq. m. Pop. 1,304,000. Capital—*Asuncion.*

Peru—Republic of South America situated on the Pacific coast of South America; area 482,133 sq. m. Pop. 8,277,031. Capital—*Lima.*

Poland—Independent Republic of central Europe, Republic was formed following the world war of reunited parts of the old kingdom dismembered about 150 years ago by Russia, Austria and Prussia. Area 119,703 sq. m. Pop. 25,225,000. Capital—*Warsaw.*

Philippines, Republic of—is the largest island group in the Malaya Archipelago. The independence of the Philippines was proclaimed on July 4, 1946 in accordance to the Act passed in the American Congress in 1934. Philippines has a republican form of government and based on that of the United States. Area 114,400 sq. m. Pop. 19,234,182. Capital—*Quezon City.*

Portugal—Republic of S. W. Europe. The Constitution is based on corporate system forming authoritarian government consisting of a President, a National Assembly and corporate chamber and a Privy Council; area 35,413 sq. m. Pop. 8,491,000. Capital—*Lisbon.*

Rumania—Independent kingdom of the Balkans; according to new Constitution of 1948 Rumania is a "People's Unitary and Independent State". It is socialistic in nature. The highest authority of the government is grand National Assembly; certain area ceded to Russia; area 91,934 sq. m. Pop. 16,000,000. Capital—*Bucharest.*

Salvadar—Republic of Central America; area 13,176 sq. m. Pop. 2,122,749. Capital—*San Salvadar.*

San Marino, Republic of—The oldest and smallest republic in the world and is one-tenth of the size of New York. It is situated in the Apennines in the heart of Italy. Area 38 sq. m. Pop. 15,100.

South Africa, Union of—It is the richest gold and diamond producing country in the world. It is a self-governing dominion. Area 472,494 sq. m. Pop. 11,790,000. Capital—*Pretoria.*

Spain—Republic of S. W. Europe; It is separated from France by the Pyrennees mountain. It was proclaimed a republic on April 14, 1931. Spain has a dictatorship form of government under General Franco. Franco is head of the State, national chief of the Falange party, prime minister and *caudillo* (leader) of the Empire. Practically, the country is ruled by the

Cabinet (appointed by Franco), the national council of the Falange Party and, to a lesser extent, the Cortes (Parliament). On April, 1947, Franco himself declared Spain a kingdom again. He was to remain head of the State, and upon his death or incapacity, the government and a Council of the Realm constituted by the law are to nominate as King "that person of royal blood who is most qualified by right" subject to the approval of the Cortes. Area 472,494 sq. m. Pop. 11,790,000. Capital—*Madrid.*

Sweden—Kingdom of North Europe; Government is a constitutional monarchy. The legislature has two chambers. Sweden is an important source of high grade iron ore and also exports lumber, pulp and paper and is known for its special technical industries (ball bearings and electrical appliances). Area 173,341 sq. m. Pop. 6,883,000. Capital—*Stockholm.*

Siam—Kingdom of South-eastern Asia; Siam is a constitutional hereditary monarchy; area 198,247 sq. m. Pop. 17,987,000. Capital—*Bangkok.*

Switzerland—is a confederation of 22 cantons. The political structure of the country in federal. The autonomy of the cantons is far reaching. On the basis of international treaties and guarantees, Switzerland is perpetually neutral. German, France and Italian are official languages of Switzerland. Area 15,940 sq. m. Pop. 4,6609,000. Capital—*Berne.*

Syria—It is now an Arab Republic in the Levent. It was formerly under Turkish Empire, but was made an independent state by the Treaty of Sevres in 1920 and divided into the States of Syria and greater Lebanon. Both were administered under a French mandate (1920-1941). A French Syrian treaty establishing an independent Syria under French military supervision was signed in 1936 and in 1941 Syria was proclaimed a republic. In 1943 French government withdrew entirely from Syria. Area 73,5877 sq. m. Pop. 3,750,000. Capital—*Damascus.*

Tibet—A lofty land of Central Asia, lying N. and N. E. of the Himalayas, mainly a high table-land. Tibet was so long a nominal dependency of China under the independent rule of Dalai Lama, but in 1950 Chinese Communist government sent their liberation forces to Tibet and in 1951 have established their supremacy. The trade with India is mostly carried on thorough various passes. It is priest state sustained by the Lamas who form 20 p.c. of the population. Their religion is Lamaism—a variant of Buddhism. Since 15th century the government is carried by double papay—Panchen Lama (also known as Tashi Lama) and Dalai Lama. The two top Lamas together govern Tibet. They are about equal in rank, although Dalai Lama has to revere Panchem Lama as his spiritual superior. As a political head, Dalai Lama is of greater importance. Area 463,200 sq. miles. Capital—*Lhassa.*

Trieste—The free territory of Trieste is bounded in the north by Italy, on the east and south by Yugoslavia and on the west by the Gulf of Panzano, an arm of the Adraiatic Sea. This free territory was set up under the terms of the Peace Treaty with Italy in 1947 and placed under the United Nations protection. Area 450 sq. m. Pop. 245,000.

Turkey—Republic of Asia and Europe; The European territory was reduced to the city of Constantinople and a narrow strip of country around it. The Turkish State is defined as "republican, nationalist, populist, etatist, secular and revolutionary." Area 296,185 sq. m. Pop. 19,623,000. Capital—*Ankara.*

United States of America—Federal Republic of North America; United States consists of 48 States and the federal district of Columbia. U.S.A. has a federal government. The Federal Government is based on the separation of powers—the President, House of Congress and the Supreme Court being designed to balance and restrain each other—hence the famous concept of 'checks and balances'. Area 2,977,000 sq. m. Pop. 145,000,000. Capital —*Washington.*

U.S.S.R.—Union of Soviet Socialist Republics composed of Russian Ukrainian, White Russian, Transcaucasian, Turkoman, Tadjakandubeg Republic. It is the largest country in the World, stretches across two continents from the North Pacific Ocean to the Gulf of Finland. Vast territory of U.S.S.R., one sixth of the earth's land surface, contains every phase of climate except the distinctly tropical and a varied topography. U.S.S.R. is a Socialist State of workers and peasants whose highest organ is the Supreme Council of the Union which exercises legislative authority. The Presidium of the Supreme Council acts as a directive body between the sessions of the Supreme Council. The highest executive and administrative power is exercised by Council of Ministers (Formerly People's Commissars) appointed by the Supreme Council. Area 8,473,444 sq. m. Pop. 192,900,000. Capital—*Moscow.*

Uruguay—Smallest republic in South America; area 72,172 sq. m. Pop. 2,330,000. Capital—*Montevideo.*

Vatican City—Papal State in Rome under sovereign jurisdiction of Pope; situated on the Vatican hill on the right bank of the Tiber in northwest Rome; area 108 acres. Pop. 1,000.

Venezuela—is the northern most state of South America; area 352,143 sq. m. Pop. 4,591,000. Capital—*Caracas.*

Yugoslavia—is a federation comprising the Peoples' Republics of Serbia, Croatia, Slovenia, Montenegro, Bosnia and Herzagovina and Macedonia. In 1945 Constituent Assembly proclaimed Yugoslavia a peoples' republic under the name of Federal Peoples' Republic of Yugoslavia; area 96,265 sq. m. Pop. 15,722,000. Capital—*Belgrade.*

United Kingdom—The United Kingdom consisting of England, Wales, Scotland, Northern Ireland, Isle of Man and the Channel Islands lies off the northwest corner of Europe. The United Kingdom is a constitutional monarchy with a king and a Parliament consisting of two houses: the House of Lords and the House of Commons. Supreme legislative power is vested in parliament which holds office for five years unless sooner dissolved. The executive power of the Crown is exercised by the Cabinet headed by the prime minister. Area 94,279 sq. m. Pop. 50,033,000. Capital —*London.*

POLITICAL INFORMATION

RULERS OR HEADS OF GOVERNMENTS OF THE WORLD

Country	*Ruler*	*Executive Head*
Afghanistan	Mohd. Zaher Shah	Shah Mahmud, P.M.
Arabia-Saudi	Abd-el-Aziz, King.	
Australia	W. J. McKell, G. G.	J. B. Chiefly, P.M.
Austria	Dr. T. Koerner, P.	L. Figl., Chancellor.
Argentina	Juan Peron P.	
Belgium		Jean Duvieusart, P.M.
Burma	Sao Shwe Thaik P.	Thakin Nu, P.M.
Bhutan	Jig-me Wang-chuk.	
Bolivia	Mamerto Urriolagoitea P.	
Brazil	General Enrico Dutra, P.	
Bulgaria	Mincho Neychev, cf of State	Vassil Kolarov, P.M.
Canada	Viscount Alexander G. G.	Louis St. Laurent, P.M.
Chile	Gabriel Videla P.	
China	Mao Tse Tung P.	Chow En Lai, P.M.
Ceylon	Lord Soulbury G. G.	S. Senanake, P.M.
Colombia	M. O. Perez	Regulo Gaitan, P.M.
Czecho-slovakia	Klement Gottwald P.	Antonin Zapotocky, P.M.
Danzig	Karl Burckhardt, H. C.	
Denmark	King Frederick, IX	Hans Hedtoft, P.M.
Egypt	Faruk I, King	Sirry Pasha, P.M.
Eire	Sean O'Kelly P.	De Valera, P.M.
Finland	J. K. Paasikivi, P.	K. A. Fagerholm, P.M.
France	V. Auriol, P.	Rene Pleven. M.P.
Germany (Western)	Theodor Heus P.	Dr. K. Adenauer, Chancellor.
Gt. Britain	George VI. K.	C. R. Attlee, P.M.
Greece	King Paul I.	A. Diomedes, P.M.
Hungary	A. Szakasits, P.	Isvan Dobi, P.M.
Iceland	S. Bjornsson, P.	S. J. Stefansson, P.M.
Iran (Persia)	Mohammed Raza Pahlevi	M. Massaduq, P.M.
Israel	Dr. C. Weizmann, P.	D. Ben Gurion, P.M.
India	Rajendra Prasad, P.	J. L. Nehru, P.M.
Indonesia	Dr. I. R. Soekarno, P.	M. Natsir, P.M.
Iraq (Mesopotamia)	Faisal II, King	Nuri as Said, P.M.
Italy	Luigi Einaudi P.	Alcide de Gasperi.
Japan	Hirohito, Emperor	S. Yoshida, P.M.
Korea (South)	Dr. S. Rhee, P. M.	Lee Bum Suk, P.
Luxemburg	Grand Dutchess Charlotte	P. Dupong, P.M.
Liberia	W. V. Tubman.	
Mexico	Minguel Aleman, P.	
Monaco	Prince Rainier III	
Morocco	Sidi Mohammed, Sultan	
Nepal	Maharaja Tribhuban Bir Bikram J. B. R.	P. M. Karolia, P.M.

Rulers or Heads of Governments of the World—Concld.

Country	*Ruler*	*Executive Head*
Netherlands	Juliana Q.	William Dress, P.M.
Norway	King Haakon VII	E. Gerhardsen, P.M.
Pakistan	K. Nazimuddin G. G.	Liaquat Ali Khan, P.M.
Panama	Daniel F. Chanis	
Paraguay	F. Chaves, P.	
Peru	Jose L. Rivero, P.	
Philippine Is.	E. Quirino, President.	
Portugal	Gen. A. Carmona, P.	Dr. O. Salazar.
Poland	M. Beirut, P.	J. Cyrankiewiez, P.M.
Rumania	C. Parhon.	P. Groza, P.M.
South Africa	G. B. Van Zyl G. G.	Dr. D. Malan, P.
Spain	Genl. Franco, Chief of State	
Sweden	Gustaf V. King	T. F. Erlander, P.M.
Switzerland	Ernest Noble.	
Syria	H. Attasi Pasha	Shukry Kawatly, P.M.
Siam	P. Aduldet King	L. P. Songgram, P.M.
Tunis	Sidi, Ahmed, Bey.	
Turkey	Celal Bayar, P.	
U. S. S. R.	Nikolai Shvernik, P.	Joseph Stalin, P.M.
United States	Harry S. Truman, P.	
Vatican City	Pius XII, Pope	Adnam Mendores, P.M.
Yugoslavia	Ivan Ribar	Josip Borz, P.M.

AMERICAN PRESIDENTS

	Name	*Politics*		*Name*	*Politics*
1789-1797	George Washington	Fed.	1869-1877	Ulysses Grant	Rep.
1797-1801	John Adam	Fed.	1877-1881	R. B. Hayes	Rep.
1801-1809	Thomas Jefferson	Rep.	1881	James Garfield	Rep.
1809-1817	James Madison	Rep.	1881-1885	Chester Arthur	Rep.
1817-1825	James Monroe	Rep.	1885-1889	Grover Cleveland	Dem.
1825-1829	John Quincy Adams	Rep.	1889-1893	Benjamin Harrison	Rep.
1829-1837	Andrew Jackson	Dem.	1893-1897	Grover Cleveland	Dem.
1837-1841	Martin Van Buren	Dem.	1897-1901	William McKinley	Rep.
1841	W. H. Harrison	Whig.	1901-1909	Theodore Roosevelt	Rep.
1841-1845	John Taylor	Whig.	1909-1913	William H. Taft	Rep.
1845-1849	James Knox Polk	Dem.	1913-1921	Woodrow Wilson	Dem.
1849-1850	Zachary Taylor	Whig.	1921-1923	W. G. Harding	Reu.
1850-1853	Millard Fillmore	Whig.	1923-1929	Calvin Coolidge	Rep.
1853-1857	Franklin Pierce	Dem.	1929-1933	Herbert C. Hoover	Rep.
1857-1861	James Buchanan	Dem.	1933-1945	F. D. Roosevelt	Dem.
1861-1865	Abraham Lincoln	Rep.	1945	Harry S. Truman	Dem.
1865-1869	Andrew Johnson	Rep.			

BRITISH PRIME MINISTERS

Sir R. Walpole	1721	William Pitt (afterwards Earl of Chatham and Duke of Newcastle)	1757
Earl of Wilmington	1742	Earl of Bute	1762
Henry Pelham	1743	George Grenville	1763
Duke of Newcastle	1754		
Duke of Devonshire	1756		

Marquess of Rockingham	1765
Duke of Grafton	1766
Lord North	1770
Marquess of Rockingham (2nd time)	1782
Earl of Sherburne (afterwards Marquess of Lansdowne)	1782
Duke of Portland	1783
William Pitt (the younger)	1783
Henry Addington	1801
William Pitt (2nd time)	1804
Lord Grenville	1806
Duke of Portland (2nd time)	1807
Spencer Perceval	1809
Lord Liverpool	1812
George Canning	1827
Lord Goderich	1827
Duke of Wellington	1828
Earl Grey	1830
Viscount Melcourne	1834
Sir Robert Peel	1834
Viscount Melbourne (2nd time)	1835
Sir Robert Peel (2nd time)	1841
Lord John Russell	1846
Earl of Derby	1852
Earl of Aberdeen	1852
Viscount Palmerston	1855
Earl of Derby (2nd time)	1858
Viscount Palmerston (2nd time)	1859
Earl Russell (2nd time)	1865
Earl of Derby (3rd time)	1866
Benjamin Disraeli	1868
William Ewart Gladstone	1868
Benjamin Disraeli	1874
W. E. Gladstone (2nd time)	1880
Marquess of Salisbury	1885
W. E. Gladstone (3rd time)	1886
Marquess of Salisbury (2nd time)	1886
W. E. Gladstone (4th time)	1892
Earl of Rosebery	1894
Marquess of Salisbury (3rd time)	1895
Arthur James Balfour	1902
Sir H. Campbell-Bannerman	1905
Herbert Henry Asquith	1908
David Lloyd George	1916
Andrew Bonar Law	1922
Stanley Baldwin	1923
J. Ramsay MacDonald	1924
Stanley Baldwin (2nd itme)	1924
J. Ramsay MacDonald (2nd time)	1929
Stanley Baldwin (3rd time)	1935
N. Chamberlain	1937
W. S. Churchill	1940
C. R. Attlee	1945

POLITICAL ASSASSINATIONS

1865—Abraham Lincoln, President U.S.A., April 14.
1872—Earl of Mayo, Governor-General of India.
1876—Abdul Aziz, Sultan of Turkey.
1881—Czar Alexander of Russia and President Garfield (U.S.A.)
1894—President Carnot of France.
1896—Shah Nazr-ud-Din of Persia.
1898—Empress Elizabeth of Austria, September 10.
1900—King Humbert of Italy.
1901—President McKinley of U.S.A., September 6.
1903—King Alexander and Queen Draga of Serbia.
1905—Grand Duke Sergius of Russia.
1908—King Carlos and Crown Prince of Portugal.
1909—Prince Ito of Japan.
1911—Stolypin, Premier of Russia.
1912—Jose Canalajas, Prime Minister of Spain.
1913—King George I of Greece.
1914—Archduke, Francis Ferdinand of Austria, June 28.
1918—Czar Nicholas and his family, July 16.
1918—President Paes of Portugal.
1919—President Kurt Eisner of Bavaria; Amir Habibullah of Afghanistan.
1921—Dato, Premier of Spain.
1922—I. Narutowicz, 1st President of the Polish Republic, June 1.
1922—Michael Collins, Irish Free State Premier.

1928—Ex-President Gen. Alvaro Obregon of Mexico.

1930—Premier Hamaguchi of Japan.

1932—President Doumer of France. Takeshi Inukai, Japanese Premier, May 13.

1933—Emir Faisal, King of Iraq, Sept. 9. Ion Duea, Rumanian Premier, Dec. 24. King Nadir Shah of Afghanistan.

1934—Austrian Chancellor Dr. Dollfus; King Alexander I of Yugoslavia; M. Barthou, French Foreign Minister; Col. Pieracki, Polish Minister of Interior.

1935—Huey P. Long, U. S. Senator, September 10.

1936—K. Takahasi, Finance Minister, Admiral Saito, Admiral Suzuki, Japan.

1937—General Baqir Sidqi, Dictator of Iraq, August 12.

1938—E. Von Rath of German Embassy, Paris.

1939—Rumanian Premier M. Calinescau.

1940—Leon Trotsky, Russian communist leader.

1942—Heydrich, German Protector of Bohemia & Moravia; Admiral Darlan of France.

1944—Lord Moyne, Br. Resident Minister at Cairo.

1945—Mehar Pasha, Premier of Egypt, February 24.

1946—Ananda Mahidal, King of Siam, July 21.

1947—Gen. Aung San, Vice-President of Burma and Five Cabinet Ministers.

1948—Mahatma Gandhi, Jan. 30.

1948—Count F. Bernadotte, U.N. Palestine mediator, Sept. 17; King of the Yemen, Feb. 17.

1949—Egyptian Prime Minister Nokrashy Pasha, Dec. 28; Syrian President Hosni Ziam, Aug. 14; Abdul Hussain, Ex-Persian Prime Minister, Nov. 4.

1951—General Ali Razmara, Prime Minister, Persia, March 7; King Abdulla of Jordan, July.

IMPORTANT ABDICATIONS IN HISTORY

	A.D.		A.D.
Diocletian (Rome) ..	305	Hsuan-Tung (China) ..	1912
Richard II (Eng.) ..	1399	Nicholas II (Russia) ..	1917
Charles IV (Spain) ..	1808	Wilhelm II (Germany) ..	1918
Napoleon (France) ..	1814 1815	Alfonso (Spain) ..	1931
		Edward VIII (Eng.) ..	1936
Charles X (France) ..	1830	Carol II (Rumania) ..	1940
Isabella I (Spain) ..	1870	Michel (do) ..	1947

INDEPENDENCE OR NATIONAL DAYS

Argentina ..	.. July 9.	Mexico ..	.. Sept. 16.
Belgium ..	.. July 21.	Pakistan ..	.. August 14.
China ..	.. Oct. 10.	Poland ..	.. May 3.
Ceylon ..	.. February 4.	Portugal ..	.. Oct. 5.
Czechoslovakia	.. Oct. 26.	Philippines ..	.. July 4.
Finland ..	.. Dec. 6.	Spain ..	.. April 14.
France ..	.. July 14.	Turkey ..	.. Nov. 1.
Greece ..	.. March 25.	Thailand ..	.. June 24.
India ..	.. August 15.	U. S. A. ..	.. July 4.
Italy ..	.. March 26.	U.S.S.R. ..	.. Nov. 7.
Norway ..	.. May 17.	Yugoslavia ..	.. Nov. 29.

NATIONAL ANTHEMS

U.S.A.	Star spangled banner
Canada	Maple leaf forever.
England	God Save the King.
France	La Marseillise.
Germany	Deutschland Uber Alles.
Soviet Union	Hymn of the Soviet Union.
Japan	Kimigayo.
India	Jana Gana Mana and Bande Mataram.

FLAGS OF COUNTRIES

Afghanistan—Green, red and black with white device in the centre.

Belgium—Three vertical bands, black, yellow, red.

Burma—Union flag is red with a canton of blue bearing a large white five-pointed star surrounded by 5 smaller stars of like pattern and colour.

Denmark—Red with white cross.

Egypt—Green with 6 white crescent and three 5-pointed white star between the horns.

Finland—White with blue cross.

France—The 'Tricolour', three vertical bands, blue, white, red (blue next to flagstaff).

Greece—9 horizontal bands, alternately blue and white with white cross in blue ground in corner.

Hungary—Red, white, green, arms in centre.

Italy—Three vertical bands, green, white, red.

Israel—White, with two horizontal blue stripes, the Shield of David in the centre.

India—A tricolour flag of white, green, orange with *chakra* (wheel) in the centre.

Netherlands — Three horizontal bands, red, white, blue.

Norway—Red with white bordered blue cross.

Pakistan—Dark green, with a white vertical bar at the mast, the green portion bearing a white crescent in the centre and a five pointed heraldic star.

Portugal—Green and red with arms in centre.

Persia—White bordered with green (top) and red (bottom), with arms (lion and sun) in centre.

Spain—Three equal horizontal bands (red, yellow and red).

Switzerland—Red with white cross.

Sweden—Blue with yellow cross.

Siam—Five horizontal bands, the blue bands twice the width of the others, red, white, dark blue, white, red.

Turkey—Red with white crescent and star.

U.S.S.R.—A Red with star above hammer and sickle.

United Kingdom—The present Union Jack is compound of three heraldic crosses *i.e.*, the cross of St. Andrew forming blue and white basis; upon which lies the red and white cross of St. Patrick; and upon the whole rests the red and white cross of St. George dividing the flag vertically and horizontally.

United Nations—White U.N. emblem (global map projected from the North Pole and embraced in twin olive branches) centred on a rectangular blue-banner.

U.S.A.—Thirteen stripes and 48 stars.

Yugoslavia—Blue, white, red.

NAMES OF WORLD'S PARLIAMENTS

Japan	Diet.
U. S. A.	Congress.
England	Parliament.
Turkey	Grand National Assembly.
Poland	Sejm.

Persia	Majilis.	Norway	Storting.
Franch	National Assembly.	Switzerland	Federal Assembly.
Iceland	Althing.	Italy	Senate.
Netherlands	States-General.	Spain	Cortes.
Bulgaria	Sobranje.	Denmark	Rigsdag.
Austria	Reichsrath.	Egypt	Barlaman.
Eire	Dail Eireann	Sweden	Riksdag.
Yugo-Slavia	Skuptchina.	Israel	Knesset.

"BLUE" BOOKS

German Government Publications *'White Books'.*

British Government Publications—*'Blue Books'.*

Italian and Mexican Publications—*'Green Books'.*

Spanish Publications—*'Red Books'.*

Japanese Publications—*'Grey Books'.*

French and Chinese Publications—*'Yellow Books'.*

Portuguese Publications—*'White Books'.*

Netherlands blue books—***orange.***

POLITICAL PARTIES AND GROUPS

Wafd—The nationalist party of Egypt established in 1919 by Zaghlul Pasha, the great Egyptian nationalist. Two factions split off from the *Wafd* after the death of Zaghlul in 1927—the *Saadist Party* in 1938 and the *Kotla* (bloc) in 1945. All Egyptian parties were nationalities in the sense that they wanted to rid the country of the British influence.

Kuomintang—The Chinese Nationalist Party formed originally by the followers of Sun-Yet-Sen in 1905. The party aims at the establishment of a modern, democratic, national state in China. It stands for national unity, territorial integrity and a strong central government. It insists on full sovereignty of China and the abolition of any unequal treaties.

Arab League—An association of Arab States formed 22nd March, 1945. The task of the League is the strengthening of the relations between the members, political collaboration, defence of the independence of member-states, discussion of Arab affairs, co-operation in the fields of economics, finance, culture and communications. The members of the League are Egypt, Iraq, Jordan, Saudi-Arabia, Syria, Lebanon and Yemen.

Centre Parties—Parties which are more conservative than left-wing parties and more progressive than right-wing parties.

Cominform -An organisation of the chief European Communist parties formed at Belgrade in October 1947 to co-ordinate the activities of the Communist parties on the basis of mutual agreement.

Conservative Party—One of the chief political parties of England. It is the successor of Tory Party of the 18th and 19th centuries. It is a party of the right, in favour of existing social and economic system and is opposed to socialism. Its policy is directed at the maintenance of the Empire, at the development of home agriculture and industry and at the safe-guarding of private property. The external policy of the party is traditionally nationalist and imperialist.

Revolutionary Communist Party—A minor group professing Trotskyism existing in almost all countries. They are left-wing communists more radical and revolutionary than Stalinist, official communists with whom they are in conflict.

Falangists—The Spanish Fascist Party led by General Franco.

I. L. P.—Independent Labour Party in England—a small semi-radical group in British Labour with a Marxist programme—stands between Labour Party and Communist.

Communist Party—is the world organisation of Marxist Socialists which once operated through branch national parties very loosely affiliated to the Communist International or 'Comintern', now abolished by the order of Stalin. The 'International' has again been revived under the name of 'Cominform' which is said to be the common Information Bureau of Communist Parties of nine countries of Europe.

Fianna Fail—De Valera's radical Nationalist party in Ireland.

Labour Party—It is the British Socialist Party composed of Trade Union, Socialist and Co-operative Societies which came into official existence in 1906. It aims bringing about, by legislation, changes which will benefit the poorer classes. Nationalization of basic industries and public utilities are main programme of the party. The party's policy is not based on Marxism—instead it is derived from the ethical idealism of the labour, co-operative and radical movements and the practical rationalism of Fabianism.

Liberal Party—Progressive Party of England, stands for free trade, was known as Whig Party in the 18th and 19th centuries, once a great political force, but now an insignificant party.

Anti-Fascist People's Freedom League, Burma (A.F.P.F.L.)—is the national organisation of the Burmese people started by its president late General Aung San who organised Burmese insurrection against Japan in early 1945.

M. R. P.—The movement Republican Populaire, is the popular central bloc of French politics consisting Catholic peasant, petit bourgeois and workmen of the Christian Trade Unions.

Popular Front Party—Political Party in different countries composed of communists, socialists and other democratic parties against Fascism and Nazism.

Democratic Party—One of the two great parties in U.S.A. It has come to be looked upon as the more left-wing of the two large American parties.

Republican Party—A great political party of U.S.A. formed in 1854 by the coalition of all opposed to the extension of slavery. The party is largely isolationst and is more right-wing of the two parties of U.S.A. Yet strictly speaking the two American parties cannot be exactly classified, under left and right pattern and there are conservatives and as well as progressive republican as there are conservative and progressive democrats. During the period proceeding World War II, the republicans were largely isolationists. But from 1940, they changed their opinion.

POLITICAL TERMS

Amnesty—An act of Government granting exemption from criminal prosecution and punishment.

Appeasement—A foreign policy of pacification or yielding to the demands of a potential enemy rather than opposing him by force.

Ambassador—High ranking minister representing his government in a foreign country.

Anschluss—German word meaning a "joining". Politically, it refers to the union of Austria with Germany effected on March 12, 1938.

Apartheid—An African word for "separateness". It means complete segregation socially and politically, of white and non-white peoples, and among the non-whites of Bantus, Indians and coloured peoples of half-castes in South Africa where Prime Minister Malan's Group Area Bill legislates for different residential and trading areas for all sections to "make South Africa safe for the white races".

Agent Provocateur—A French term for political agent sent during political or social conflicts into the advisory's ranks to provoke in the guise of an adherent incidents and compromising actions.

Authoritarianism—The political system in which the government is based on what is claimed to be the natural need for a strong and resolute authority to direct the state without reference to the fluctuating opinions of the people, as opposed to the democratic system based on their freely expressed opinions. The term is a milder name for absolutism. Totalitarian systems like Fascism, Nazism and Communism are extreme forms of authoritarian government, although Soviet Union would reject the application of the term to itself.

Anti-Semitism—Opposition to the Jewish race. The movement became conspicuous in Europe during the last quarter of the 19th century. The movement appears to be based on economic rather than religious or political cause. It flared up strongly in Nazi Germany under Hitler.

Armed Nationality—The position assumed by a neutral when it serves notice on belligerents that it is prepared to protect its neutral rights by force.

Autocracy—means the unlimited rule of an individual.

Absolutism—The system of unlimited government, the governed having no representation, vote or other share in the administration. An absolute ruler governs in accordance with his own will without consulting the people and without being bound by any law. Absolutism is opposite to constitutional government and democracy and the antithesis to the separation of powers.

Autarky—A term used for the idea of national self-sufficiency. The usual motive of autarky is the striving of domestic producers to monopolise the market, preparation for war and blockade and a general transference of nationalism to economics. Means for fostering autarky include protective tariffs, a ban of imports, subsidies and deliberate planning.

Armistice—Agreement between combatants to cease fighting. It may be either temporary for the purpose of removing the wounded or burying the dead or it may be a preliminary to a general peace.

Anarchism—A political doctrine standing for the abolition of every organised authority and state machinery and the creation of stateless society instead. The anarchists hold that every form of government tant-amounts to tyranny. They want to do away with all forms of state and government and to substitute for them free associations of individuals or groups without any coercive organisation, without written law, police courts, prisons or armed forces.

Ballot—The paper on which are printed the names of candidates for office in elections. The elector indicates his choice by marking a cross in plurality electoral systems.

Bilateral—Two-sided, a term used of agreements concluded between only two parties, as distinct form multilateral agreements which are between several parties.

Balance of Power—This phrase means the preservation of an equality of strength between countries or groups of countries. The idea is that no one country shall become too powerful for the safety of the others.

Blockade—A term used in international law for the prevention of goods entering or leaving an enemy country by land or sea. Neutral States are affected most by a blockade by sea, for if their ships try to approach the ports of blockaded country, they and their cargoes are liable to be confiscated by the blockading force.

Bourgeois—Name given usually in contempt to the middle class, specially those in commerce as opposed to proletariat—the propertyless class who lives without any property throughout and living only through the sale of their labour. This meaning was carried to extreme lengths by followers of communism.

Bicameral System—That form of government which consists of two separate chambers or houses, the concurrence of both ordinarily being essential to the enactment of legislation.

Bloc—means an association of legislative members or of political workers of different parties, formed to support a certain measure or ministry. A French word meaning 'mass' or 'group'.

Bolshevism—accepts the doctrine that an irreconcilable antagonism exists between the propertied class or bourgeois and the property-less workers. It invites as inevitable and necessary class war, the object of which is the destruction of all classes, except the proletariat, in whose interest and by whom future society will be organised and governed on a communistic basis.

Brain Trust—In U.S.A. the nickname for a group of economists and businessmen who were officially advisers to President F. D. Roosevelt during the first year of his presidency and are believed to have greatly influenced his 'New Deal' policy. The term has since been applied to other groups of experts believed to be influencing government.

Buffer State—a small state established or preserved between two greater states to prevent direct clashes between them.

Bureaucracy—government by an elaborate system of administrative departments and officials which generally tends to become unwieldy and laborious in its operation. It produces red tape or over-systematization. Its most frequently charged defects are rigidly, conservatism and spirit of routine.

By-election—Election to a seat rendered vacant during the running term of an elected body due to resignation, death or any other subsequent disqualification.

Capitalism—the economic system founded on free enterprise and private ownership of the means of production and distribution.

Caucus—A meeting or conference of members of a political party or group to determine upon the candidate or policy to be supported in an ensuing election or other political contest.

Civil Disobedience—Refusal to co-operate with government without however using violence.

Coalition—is a combination of political parties having different or opposed interests, effected with the object of carrying through or resisting a particular policy.

Concordat—An agreed pact; specially between Pope and a government; equivalent to international convention.

Contraband—goods or merchandise the importation or exportation of which is forbidden; in war time applied specially as between neutrals and belligerents.

Consul—is a public officer authorised by the State to manage commercial affairs of its subjects in a foreign country.

Conscription—A system of compulsory enrolment for naval or military service.

Communism—Represents revolutionary socialism, hostile to the slow progress or gradual reform and progressive compromise. Communism believes in the dictatorship of the proletariat for a transitional period, after which a free society would come into existence in which every body would contribute to the common weal according to his capacity and receive a reward according to his need—Communism proclaims the equality of all peoples and races and believes in the final establishment of an international order.

Collective Responsibility—in countries with parliamentary government, the joint responsibility of the government to the Parliament. The government is responsible for the political actions of each member of it and each member is responsible for the actions of the government.

Cold War—International tension following World War II between U.S.S.R. and Soviet satillite States on one hand and Western European States, U.S.A. and Canada on the other.

Dollar Diplomacy—A nickname for the foreign policy of U.S.A. for the purpose of expanding American financial and commercial interests abroad under the guise of promoting international friendship.

Corporate State—A state organised politically on the basis of vocational corporations instead of territorial units. A corporate parliament does not consist of representatives of territorial constituencies but of delegates of professional corporations who are sent to the parliament according to the quota system.

Collective Security—All countries should jointly guarantee the security of each other—it is the basic principle of the League of Nations covenant and the United Nations Charter.

Coup D'etat—a sudden change of government by force effected by holders of government or military power.

Constituent Assembly—is an assembly convened for the purpose of drawing up a constitution, but it only comes and this is the vital point —after there is a breakdown in the existing machinery of Government and a change has been brought about in the *status quo*.

Colour Bar—the limitation by whites of social intercourse with non-whites.

Condominium—A common rule of two or more nations in a territory such as Anglo-Egyptian Sudan.

Conscientious Objector—Person who refuses to enlist in the military service on moral or religious grounds.

Colony—a company of people, purposely or otherwise transplanted from their mother country and remaining subject to the jurisdiction of the parent State.

Crown Colony—A Br. Empire colony in which the Crown retains some kind of control over legislation.

Customs Union—A union of states or nations for the purpose of establishing orderly trade with one another and a common tariff on imports.

exports and goods in transit as now established in Low Countries of Europe.

Detente—Diplomatic term from the French, meaning a lessening of tension.

Democracy—"Government of the people, by the people, and for the people—*Lincoln*. It is based upon freely elected representative institutions and upon an executive responsible to the people. It is based upon the fundamental assumption of the equality of all individuals and of their equal right to life, liberty (including the liberty of thought and expression) and the pursuit of happiness.

Demarche—Diplomatic term from the French, used for representations whether moderate proposals or severe threats, made by one state to another through diplomatic envoys.

Diarchy—A form of government in which the supreme power of the state is vested in two bodies or persons.

Diehards—extremely orthodox and unbending members of a party, it was specially applied to the members of the Conservative party.

Dictatorship—Control of Government or ruling power by a minority or by an individual. In ancient Rome the dictator was recognised as a ruler. In modern times, Dictatorship flared up in Europe after the World War I. Mussolini in Italy and Hitler in Germany seized power unconstitutionally but with the support of the people.

Dominion Status—Dominions "are autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or external affairs, united by a common allegiance to the Crown."

Diplomacy—Art of negotiation specially between countries. Each country possesses a diplomatic service to carry on negotiations with foreign countries. Some diplomats such as ambassadors, ministers, envoys, etc., go abroad and live in a foreign capital to keep in touch with the Government.. Their business is to watch over interests of their country and to send regular reports upon all that concerns it.

Electoral College—Any body of elector limited in number, meeting in one place to choose a public official.

Extra-Territoriality—the legal fiction that foreign diplomats and diplomatic agencies are outside their country of residence inspite of physical presence. Embassies etc. form foreign islands, so to speak, within the territory of a state. They are not subject to its laws and may not be entered by it.

Embargo—Government order preventing ships leaving port.

Extradition—Surrender of a fugitive from justice by one country or state to the authorities of another.

Ersatz—German word for 'substitute' used to denote artificial substitutes for raw materials and foodstuffs lacking in Germany.

Espionage—A French word which expresses more than English word spying; it implies an organised system.

Federalism—A system of government wherein political powers of the state are constitutionally distributed between National Government and the local Governments of members units which are called 'States', 'Provinces', etc. The division of powers between Federal government and separate states is laid down in the constitution and varies between one another.

Fifth Column—Term originated during Spanish War (1936-39) when General Franco's troops in four columns, attacked Republican Madrid from outside, while the General's supporters organised internal uprisings. These internal fighters were styled the 'fifth column'/ Since applied to enemy sympathizers in any country, who attack in rear, whether with arms or by propaganda.

Filibuster—a politician who attempts to delay, or stop, the passing of a bill by endless speech making and other legitimate practices.

Four Freedoms—as enunciated by President Roosevelt are as follows (1) Freedom of Speech, (2) Freedom of Religion, (3) Freedom from Want and (4) Freedom from fear.

Guerilla—Irregular warfare. Guerilla warfare consists in attacks upon a regular army by bands of irregular troops, usually the inhabitants of an invaded country.

Genocide—the wholesale destruction of peoples or races and measures conductive to it. In 1948 U.N. proclaimed genocide a crime. An agreement to this effect was adopted by the General Assembly in 1948 which is yet to be ratified.

Gentleman's Agreemnt—Diplomatic agreement between statesmen, economists etc., not embodied in formal document.

Hegemony—Leadership; especially of one state or a group.

Imperialism—Policy of national expansion especially annexation of territory or control of a subject population.

Internationals—Socialist movement in which socialists from many countries are united. There have been three such movements or Internationals, and each has held several Congresses. *First International*—accepted a programme drawn up by Karl Marx and had lasted from 1866 to 1874. *Second International* in which there was trade union element, was organised in 1889. It sought to compass the aims of Socialism by constitutional, not revolutionary action and it held several congresses between 1882 and 1930. *The Third International* was organised in Moscow and was revolutionary in its aims. It declared in favour of establishing communism by force.

Imperial Preference—In the British Empire, the trading system whereby the members of that Empire give to each other preferential treatment in their tariff regulations and import quotas.

Iron Curtain—a term denoting the Steltin-Trieste line in Europe, the territories to the east of which are directly or indirectly controlled by U.S.S.R. The term was coined by W. S. Churchill when he referred to the fact that Russians had sealed off the lands behind the line so that people in one part of Europe could know little of what was really happening in the other.

Jitterburgh—phrase of American origin applied to apprehensive and excitable alarmists.

Joint Responsibility—The guiding principle of the Cabinet system of government. Although every minister is in charge of a particular portfolio, all ministers are jointly responsible to the legislature and a vote of no-confidence against one is a censure on all.

Lebensram—German word for 'living space', a new word for German imperialism. It was used to stress that population is too dense and to claim such territories as agricultural regions towards Black Sea and Colonies overseas.

Lockout—Refusal by employers to re-employ the workers on strike.

Left-wing Parties—the progressive parties whose representatives customarily sit on the left-hand side (viewed from the chair) in the parliaments of most countries. The custom dates from the French National Assembly of 1789 in which the progressives sat on the left, moderates in the centre and the conservatives on the right. Now a days 'left' is more or less synonymous with 'radical' in its general meaning.

Lend-Lease—the system of lending and leasing supplies and installations to each other developed by the allies in the World War II. It was started by President Roosevelt.

Marxism—the Socialist doctrine following the theories of Karl Marx (Germany). His ideas are that all wealth is produced by Labour and should go to labour, and that as this leaves nothing for the capitalist, who can therefore never accept the system, the worker must prepare for a class war in which capitalism will be destroyed. An essence of his theories is that history is largely determined by economic forces.

Minority—Any racial, religious, occupational or other group constituting less than a numerical majority of the population whose interests need protection from an overpowering majority controlling the government.

Maquis—A French guerilla organisation formed to resist the Germans and sabotage their conquest in the World War II.

Moratorium—A period during which no business engagements are completed or debts or liabilities enforced. A moratorium is declared by the government in times of a financial crisis.

Most Favoured Nation Clause—a clause customary in treaties of commerce whereby signatories undertake to extend automatically to the other party any reduction in tariff or other economic favour which they may in future accord to any other country.

Military Attache—In time of war neutral powers often send officers to be attached to the field staff of each belligerent for the purpose of making independent reports to their government.

Naturalisation—The word is used for the admission of a person of foreign nationality into that of a country he desires to adopt. An oath of allegiance has to be taken.

Navicert—The method of certifying goods which might be imported into neutral countries.

Non-aggression Pact—Treaty between two or more states pledging each not to attack the other and to settle their disputes by negotiation or arbitration.

Non-intenvention—Generally the principle of abstenation from interference with the internal affairs of other nations. It rests on the recognition of sovereignty as the permanent factor in international relations and is one of the most often involved principles in the policies of the world.

Non-belligerency—This word is used for sympathetic attitude, short of fighting, which a country adopts towards one side in war time. It therefore differs from the strict impartiality called for in neutrality.

Nationalisation—Taking management by the state of trades and industries, etc., with or without compensation; changes from private to state ownership.

Neutrality—In international law, condition of a state abstaining from participating in a war between other states and maintaining an impartial attitude in its dealings with the belligerent states, with the recognition of this impartiality by the warring states.

Exchange Control

Open Door Policy—System of keeping trade open to all countries, disregarding monopolies or preferences on equal terms without privileges or discrimination.

Opposition—Freedom to oppose the existing government is fundamental to democracy and the British practice of calling the opposition "His Majesty's Opposition" on the analogy of "His Majesty's government" is a recognition of the fact that the opposition is as loyal and essential to the state as the government.

Ordinance—That which is ordained by authority. Ordinance is an act promulgated by the chief of the state without passing through the legislature of a country.

Parole—An oath taken by a prisoner of war that, if released, he will not try to escape, nor during a war bear arms against his captors.

Point of Order—A question raised by a member of a legislative body as propriety of a motion or proceeding under the rules. The presiding officer is required to rule on it immediately as his ruling is subject to appeal to the floor.

Power Politics—(1) the policy of maintaining and expanding national power for power's sake, (2) the sum total of international relations in a world consisting of sovereign states whose existence depends on power, (3) by a more narrow definition, the use of threats and force for the achievement of political objects in international relations without consideration of right and justice.

Purge—Expulsion, possibly killing of unreliable, unruly, disobedient or merely inconvenient members of a party.

Putsch—German word meaning "attempt to take by force", specially power, control of state.

Prize Court—This is a court of law set up in time of war to decide whether a ship and its cargo captured by the navy is a lawful prize or not. If it is decided that a captured ship is enemy property or a cargo is contraband, they are sold and the proceeds are distributed to all members of the navy at the end of the war.

Privy Purse—In England allowance from civil list for personal use of the Sovereign.

Prohibition—Government action which prohibits by law the manufacture and sale of intoxicating liquors except for medical or sacramental use.

Plural Voting—System allowing a person to cast more than one vote in the same election. The voter is eligible to vote in more than one constituency by virtue of its special position *i.e.,* a city and a university vote by the same person.

Provincial Autonomy—The system (specially in Indian Constitution) under which States enjoy complete autonomy as far as the States subjects are concerned and have concurrent jurisdiction with the centre on subject of common interest.

Protectorate—An area which is protected by a superior authority from domestic or foreign disturbance or dictation and shares in its own government.

Proportional Representation—is the method used in an election by which the votes are so counted that each party has representation in the elective body in proportion to its strength, so as to ensure the representation of minorities.

Plebiscite—An expression of the will of the whole people, sought in ratification or disapproval of a particular measure, already decided but regarding which their elected representatives hesitate to act. It comes from the Latin *plebs*, the common people.

Protocol—The rough-draft of a diplomatic document on which diplomatic transactions tentatively commenced.

Privileges, Parliamentary—"the sum of peculiar rights enjoyed by each House collectively as a constituent part of the High Court of Parliament, and by members of each House individually, without which they could not discharge their functions and which exceed those possessed by other bodies or individuals."—*Erskine May.*

Pourparler—An informal preliminary conference of representatives of different groups, functions or countries looking to a formal agreement settling disputed questions between the parties.

Picketing—Walking up and down in front of a place of business in an effort to keep other persons from patronising or working in it.

Pacifism—opposition to war or military force in any form. Pacifists believe that all intentional disputes should be settled by arbitration. The various movements toward world peace are not necessarily wholly pacifistic, as they often advocate defensive war and oppose only aggressive war.

Plenary Powers—Absolute and complete powers. Term commonly used in diplomacy.

Pogrom—A Russian word for 'devastation' a term for mass raids on Jewish quarters in Tsarist Russia; killing, looting and arson were practiced. They were later introduced into Germany by Nazis.

Public Utilities—Electric light, gas, telephone, street car and other services of use to all members of the community.

Proletariat—The wage-earning class of a community collectively *i.e.* propertyless class dependent on sale of labour. In Maxism, the Proletariat is opposed to the bourgeoisie, the employing class and will eventually overthrow it.

Politbureau—Short for political bureau, the leading body of communist parties. The communist party of Soviet Union has a Politbureau which is regarded by many as real government of Russia. Every communist party in whatever country has a Politbureau.

Popular Democracy—Another name for Communist dictatorship. According to communist theory, a half-way house on the road to communism.

Quislings—Local traitors, named after the Norwegian traitor, Major Quisling, who betrayed his country to the Germans; specially those who quietly prepared the way for Germany in her neighbouring countries.

Radical—persons of political views quite different from those held by the majority of persons who, in politics, are in favour of sweeping reforms or other change in government or laws.

'Reds'—slang term for revolutionaries, specially communists, derived from Red Flag, the traditional symbol of revolt.

Republic—State in which the sovereign power resides in the electorate, which is the body of the people having a voice in electing representatives to rule them. There is no hereditary sovereign to rule.

Residuary Powers—in Federal Constitution where the powers are divided between the federal centre and the federating States or units under a system of three lists—federal, state or provincial and concurrent. Powers relating to new spheres of administration not covered by either of the three lists are known as residuary powers.

Reprisal—A retaliatory punishment inflicted by one country upon another for an allegedly illegal act.

Right and Left—in the legislative bodies, it is the fixed habit of the conservative groups and parties to seat themselves on the right hand side of the Speaker or President and of the liberal or radical element to seat themselves on the left. The term 'centre' is used for middle parties or groups.

Ratification—the confirmation of an international treaty concluded by a government by the head of the State concerned. As a rule, all international agreements require ratification and do not become valid before it. In most countries, constitutional law or convention requires that the treaty be approved by the Parliament before it is ratified by the head of the State.

Regent—One who rules on behalf of a sovereign, when a sovereign is a minor, or is insane, or in any other way incapable of ruling, it is usual to appoint a regent to act for him.

Racketeer—One who levies blackmail on industry by threats of interference.

Referendum—Bringing a proposed law before the people as a whole for decision.

Reciprocity—Exchange of commercial privilege. It is usually experienced when two nations make tariff concessions to each other.

Sanctions—Coercive measures taken to ensure fulfilment of international treaty obligations. Sanctions were provided in the covenant of the League of Nations against countries restorting to war in defiance of the Covenant. U. N. Charter also provides for sanctions though it does not use the word 'sanctions'.

Secret Session—For the discussion of important questions, Parliament sits in secret on various occasions when all withdraws from the house except the members.

Sphere of Influence—A region normally undeveloped, politically under the determinative power of a foreign nation.

Soviet—Council; a local governing body in the U.S.S.R. composed of peasants, soldiers and workers which send deputies to the higher congress.

Stalmate—a deadlock.

Straw vote—Unofficial polling of public opinion.

Suzerainty—A State that exercises political control over another state in relation to which he is sovereign.

Syndicalism—A socialist movement aiming at trade union socialism instead of State Socialism.

Scorched Earth—a wartime policy of destroying all resources when defending forces had to withdraw before the invader.

Sitdown Strike—An organised protest of labour in which workers remain in their place of employment without working, to prevent the continuation of production until a settlement is reached.

Sabotage—At first this word was confined in its meaning to malicious waste or destruction of an employer's property by workmen, as a means of enforcing demands in labour disputes. Now it is being applied more broadly, to define any malicious crippling or destruction of property, especially as practiced by foreign secret agents or sympathisers for the purpose of damaging military equipment.

Self-determination—The principle that every distinct people or nation ought to have the right to determine the question of its independence, its form of government and its political destiny.

Tammany Hall—A name given to the Democratic Party's organisation in New York city, which sprang from Tammany society of 1805. One of the famous political machines of American history very influential in New York city and State politics, also in the Democratic party on a national scale.

Third Force—A term originating in the post-World War II; France, where it was applied to the Socialists and M.R.P. intermediate between the communists and the right-wing supporters of De Gaulle. It has been applied elsewhere to policies intermediate between Communism and Fascism and othr right-wing forces. It is applied also to a group of States—W. Europe which would be sufficiently strong and influential to reconcile the U.S.A. and U.S.S.R. by co-operating with both.

Totalitarian—a believer in the complete centralization of government control under one political group and suppression of other parties.

Total War—denotes the present form of war in which the distinction between combatants and non-combatants are fast disappearing.

Theocracy—A state governed by God or priests.

Tory—A member of the Conservative Party of England.

Trotskyism—The views of Trotsky on socialism, revolution and the development of Soviet Union and the movement propagating these ideas. After the overthrow of Trotsky in 1925-7, a number of communists supporting his opposition to Stalin formed revolutionary communist parties which in 1936 established Fourth International which held conferences in Paris in 1936 and 1948. They are left-wing communists, more radical and revolutionary that Stalinist, the official communist with whom they are in conflict. These Trotskites have appeared in various countries as 'Revolutionary Communist Party', 'Revolutionary Socialist Party' etc.

Trusteeship—Administration by a member of the United Nations of an area not yet ready for self-government.

Unilateral action—Action taken by one party to an agreement without consulting the other parties in international affairs.

Ultimatum—Final statement of demands, rejection of which is assumed to lead at once to breaking-off friendly relations and to war.

Underground—organised, secret opposition to the government or force in power.

Ukase—official order or decree.

V. E. Day—Victory in Europe. May 8th 1945, the day of the official end of the European phase of the World War II.

V. J. Day—Victory in Japan, August 14, 1945; the day making the end of the war in Japan.

Warmonger—people who desire war and support war-like policy.

Whigs—Old name for English liberals, no longer in use. It was the description of liberal party in English Parliament after 1680.

Visa—Official approval stamp written over passport or documents.

Veto—The term is most used to-day with reference to the United Nations but its history dates from Roman times. *"Veto"* is Latin for "I forbid it"; it was the word used by the Roman magistrate when invoking the law against some action. In many modern States the King or President has the power of vetoing measures passed by the legislature. In the United Nations, only the five permanent members out of the eleven members of the Security Council have the power of veto, which prevents a decision being taken even if every other member is in favour of it. The United Kingdom, the United States and China have never yet exercised the veto; the U.S.S.R. has done so repeatedly, and France twice.

Wishful Thinking—signifies optimism not always founded on reality.

Whip—A member of a political party assigned to the task of rounding up members of that party to ensure their votes and to hold them in line with party policy.

Writ—A document directed to some public officer or private person commanding him to do a certain act therein specified.

PLANS, POLICIES, TREATIES ALLIANCES, COUNCILS, CHARTERS, CONFERENCES, ETC.

Atlantic Charter—A joint declaration was made by Roosevelt-Churchill on August 14, 1941, stating (1) no aggrandisement, territorial or other. (2) No territorial changes without expressed wish of the people concerned. (3) Right of all people to choose the form of their own government. (4) Restoration of sovereign rights and self-government to those who have been forcibly deprived of them. (5) Access on equal terms to trade and to raw materials of the world. (6) Fullest collaboration between all nations in economic field. (7) Final peace of the whole world after destruction of Nazi tyranny.

Arab League—The formation of Arab League in 1945 was largely the outcome of the movement which sought to recreate and reintegrate the Arab community as a separate national group held together by the memories of common past, common religion and a common language. The object of the League is to strengthen the ties between the parties, to co-ordinate their political programmes, to preserve their independence and sovereignty and to consider in general the affairs and interests of Arab countries. Arab States formed a union by a pact signed in Cairo (March 22, 1945). The League consists of Egypt, Iraq, Transjordan, Saudi-Arabia, Syria, Lebanon and Yemen. Provision was made for admission of Palestine conditional upon her achievement of independence.

Asian Relation Conference—An unofficial and non-political conference of Asian countries held at New Delhi in 1947 with the object of discussing economic, social and cultural problems common to all Asian countries, controversial political issues being excluded from its agenda. The main subjects of discussion were (1) National movements for freedom in Asia, (2) Racial problem and conflicts, (3) Inter-Asian migration, (4) Agricultural and Industrial development, (5) Labour problems and social services, (6) Status of women, etc. The formation of a permanent Asian Relations Organisation was also announced in 1949 with headquarters at New Delhi.

Benelux—This is the combination of three countries—Belgium, Luxemburg and the Netherlands which have established a complete Custom Union among themselves. No longer are there any tariff barriers between these three countries. All three are now together called Benelux. The Benelux has been an influential example of closer economic co-operation for recovery of Europe.

Brussels Pact—The pact was signed in March 1948 by Britain, France and the Benelux countries. It is a military defence pact and also equally an economic co-operation pact. It pledges all five countries to cease from bilateral injury to one another and to enlarge their commercial exchanges.

It was designed "to fortify and preserve the principles of democracy, personal freedom and political liberty, the rule of law and constitutional traditions."

Colombo Plan—is a plan of British Commonwealth of Nations to improve the standard of living of the people of South East Asia. The plan which is a six year development programme aims to provide basic economic development of the area and fundamental projects on agriculture, irrigation, power and communications, railways, roads, ports and harbour installations have been approved. It also provides for essential development in the sphere of social services, like health, housing and education. The Colombo Plan aggregates the development plans of India, Pakistan, Ceylon, Malaya and British Borneo for the next six years 1951-57. The total sum involved is Rs. 2,449 crores, out of which the Indian Plan accounts for Rs. 1,800 crores, Pakistan Rs. 370 crores, Malaya and British Borneo Rs. 143 crores and Ceylon Rs. 136 crores. So far as India is concerned the scheme of development proposed for India is designed to improve the standard of living, provide a modicum of social services and supply sufficient capital and consumer goods to restrain inflation.

Cominform—At a secret meeting on Sept. 21-28, 1947, representatives of the communist parties of nine European nations re-established Communist International (Cominform) which was officially dissolved in Moscow on May 22, 1943. The formation of the fourth International, officially called Information Bureau with headquarters in Belgrade, Yugoslavia was announced in Moscow on October 5, 1947. Communist parties of following nations were represented—U.S.S.R., Yugoslavia, Poland, Hungary, Bulgaria, Rumania, Czechoslovakia, France and Italy.

The manifesto stated that it was essential for the anti-Imperialist democratic camps to carry out a co-ordinated programme of action and evolve their own tactics against American imperialism, against its British and French allies and against the right wing socialists particularly in Britain and France.

Council of Europe—The Council of Europe has been formed in May 1949 by the Western Powers which is an experiment for the United States of Europe. The nations participating in the Council are Belgium, Denmark France, Ireland, Italy, Luxemburg, Netherlands, Norway, Sweden and United Kingdom. The Council consist of two chambers—the lower one consists of the ten foreign ministers and upper one called Consultive Assembly and consisting of 87 delegates. The frame-work of organisation is embodied in a statute agreed between the ten Foreign Ministers of the founder-governments. The Statute defines the Council's aim "as achieving greater unity in order to preserve their common heritage and promote their social and economic progress." The defence and economic matters are not to be discussed.

Declaration of Human Rights—was passed by the General Assembly of U.N. on Dec. 10, 1948. The declaration was designed as a statement of what men and women are entitled to expect in a civilized world. The Declaration of Human Rights proclaimed the inherent rights of the individual as against the power of any totalitarian state. "No one shall be subjected to arbitrary arrest . . . to arbitrary interference with his privacy, family, home . . . No one shall be forbidden to leave any country, including his own . . . Every one has the right to freedom of opinion and expression. The will of the people shall be the basis of the authority of governments; this shall be expressed in periodic and genuine elections. Every one has the right to work . . . to protection against unemployment . . . to join trade unions. Every one has the right to a standard of living adequate for health and well-being of his family . . . Every one has the right to education."

Dumbarton Oaks Conference—a meeting of the representatives of U.S.A., Great Britain, Russia and China held at estate known as Dumbarton Oaks in Washington, recommending on Oct. 9, 1944 the creation of the United Nations, an international security organisation.

Freedom of News Convention—was adopted by U.N. on May 14, 1949. The purpose is to protect the freedom of correspondents and news agencies operating in the various countries. They are to have free access to the sources of information and the right to transmit news freely. There is to be no peacetime censorship of news except for reason of "national defence".

Genocide Convention—was adopted by U.N. on Dec. 9, 1948. The word genocide was coined by Prof. R. Lamkin of Poland to mean the deliberate extermination of any human group on racial, religious or linguistic grounds. The convention binds its signatories to prevent and punish the crime of genocide.

Four Freedoms—The President Roosevelt in his address to the Congress of Jan. 6, 1941 defined four essential human freedoms—(1) freedom of speech and expression, (2) Freedom of every person to worship God in his own way, (3) freedom from want and (4) freedom from fear.

Imperial Conference—A gathering in which ministers representing the United Kingdom, Canada, the Commonwealth of Australia, New Zealand, the Union of South Africa, the Irish Free State, Newfoundland discuss matters relating to the Empire as a whole. Imperial Conferences which have been held in 1911, 1917, 1918, 1921, 1923, 1926 and 1930 carry on the purpose of earlier "Colonial" Conferences. In July and August, 1932, an Imperial Economic Conference was held at Ottawa to stimulate trade between the various parts of the Empire. The Conference is now known as 'Commonwealth Premiers' Conference' which held a sitting in 1948.

International Red Cross—Two international organisations known respectively as International Committee of the Red Cross and the League of Red Cross Societies, both with headquarters in Geneva, Switzerland. The first of these is a wholly international agency unconnected with any national society which attempts to maintain the basic Red Cross principle of the Geneva convention; the second agency is a federation of autonomous national Red Cross Societies designed to further cooperation among them.

League of Nations—An organisation of many nations formed in January, 1920 for the promotion of international peace and co-operation; dissolved in April, 1946.

Little Assembly—The Interim Committee of the General Assembly of the United Nations which functions while Assembly Proper is not in session. It was set up by the Second Session of the General Assembly at Lake Success in 1947. The Soviet group countries boycotted it on the ground that it amounted to a perpetuation of the General Assembly contrary to the charter and that it was an attempt to bypass the veto on the Security Council.

Marshall Plan—also known as Organisation for European Economic Co-operation; on June 5, 1947, the U.S. Secretary of State Marshall made a speech in the Harvard University in which he outlined the seriousness of the shortage of dollars for the economic situation of Europe and suggested American assistance in the economic recovery on the understanding that the European countries reached some agreement about their requirements and the part they themselves would take in giving proper effect to the action of U.S. A conference of sixteen nations of Europe willing to work the Marshall Plan began in Paris on July 12, 1947 and formulated an economic recovery programme which aimed at restoring European economy by the end of 1950 by (*a*) a strong production programme by each participant, (*b*) creation and maintenance of internal financial stability, (*c*) maximum mutual help between the participating countries and (*d*) a solution of the problem of the European trading deficit with the American countries. The report calculated the deficit for the 16 countries and their dependent territories at $22,440 million over 4-year period.

Munich Agreement—Signed by Germany, Great Britain, France and Italy on September 29, 1938 at Munich. It provided for the cession to Germany of the Sudetan-German districts of Czechoslovakia; the new frontiers were guaranteed by all the signatories. The agreement was violated in March, 1939 by Hitler seizing what was left of the country.

Monroe Doctrine—An important declaration of policy by President Monroe of U.S.A. on Dec. 2, 1823 in which he declared "that American continents by free and independent condition which they have assumed and maintained are henceforth not to be considered as subjects of future colonisation by any European Powers."

Philadelphia Charter—was adopted by the International Labour Organisation at the Philadelphia Conference on May 10, 1944. It declares: that labour is not a commodity; that freedom of expression and of association are essential to sustained progress; that poverty anywhere constitutes a danger to prosperity everywhere; and that war against want requires to be carried out with unrelenting vigour within each nation.

North Atlantic Treaty—was signed on April 4, 1949 by Belgium, Canada, Denmark, France, Iceland, Italy, Luxemburg, the Netherlands, Norway, Portugal, United Kingdom and U.S.A. at Washington. The treaty stated among others that the parties were determined to safeguard the freedom, common heritage and civilization of their peoples, founded on the principles of democracy, individual liberty and the rule of law. Parties undertook to settle any international dispute by peaceful means. The parties will consult together whenever the territorial integrity, political independence or security of any party is threatened. The parties agreed that an armed attack against one or more of them in Europe or North America should be considered an attack against them all, and consequently they agree to assist the party or parties so attacked by taking forthwith individually and in concert such action as it deemed necessary, including the use of armed force to restore and maintain the security of the North Atlantic area.

Panama Declaration—established a neutrality zone round the American Continent.

Pan-American Union—An international body created by the 21 American republics for the fostering of mutual understanding and co-operation, with the essential duty of making effective the resolutions adopted by the successive Pan-American Conferences. A general Conference of the member Republic is held quinquennially known as *Pan-American Conference.* The Union is financed by its 21 members on the basis of population.

Trusteeship Council—It is one of the organs of United Nations. It is responsible for the territories held under mandate, detached from the enemy States after the world war or voluntarily placed under trusteeship by States responsible for their administration.

Truman's Point Four Programme—In his inaugural address, Jan. 20, 1949, President Truman outlined a four-point U.S. policy for helping to maintain world peace and freedom. *Point 1*—continued unfaltering support of the United Nations. *Point 2*—continuation of American programme of world economic recovery. *Point 3*—strengthening of freedom-loving nations against aggression through collective defence.

Truman Doctrine—A name given to the policy announced by President Truman in 1947 in respect of Turkey and Greece. The President stated that the protection of these countries against totalitarian encroachment, meaning Soviet aspirations, was of vital interest to U.S.A. Financial and technical aid was extended to these countries by the United States.

United Nations—Permanent organisation set up in 1945 to establish and preserve world peace, security and democracy.

Versailles, Treaty of—the peace treaty ending the war of 1914-18; concluded between the Allies and Associated Powers and Germany on June 29, 1919. It imposed terms on Germany in regard to the occupation of Rhineland territory for a period of years, the surrender of Alsace-Lorraine to France and parts of East Prussia to Poland, the handing over to the Allies of Germany's colonial possessions. An important feature of those treaty was the establishment of League of Nations.

Western Union—Organisation of Economic European Co-operation was formed by the sixteen European countries receiving Marshall aid. They declared that the maximum possible effect of increased production will be obtained only if individual country is willing to take into account the economic needs of the group as a whole when planning for production. The sixteen European countries are working out plans for industry, agriculture, fuel and power trade and production for next four years. It is pledged by its constitution to draw all 16 countries together in joint programmes for the exchange of commodities and services. It is pledged to inspire them towards joint actions for "relaxing restrictions on trade."

INDIA AT A GLANCE

The Union of India covers an area of 1,138,814 square miles and extends from north to south for a distance of 2,000 miles and from east to west nearly 2,000 miles. She is roughly two-thirds the size of Europe excluding Russia or thirteen times that of Great Britain. Within her 300 mile land frontier and an equally long coast line are to be found types of climate and vegetation as varied as those of Europe. India has some of the loftiest peaks, the greatest plains, the longest rivers and the driest as well as wettest regions in the world. The climate ranges from the tropical heat to the temperate coolness of the mountain regions; on the whole, it is a land rich in resources of all kinds—plants, animal, soil and mineral.

PHYSICAL DIVISION

India can be divided into several divisions, but broadly speaking, there are *three distinct physical divisions or 3 regions.*

1. The Himalayan region.
2. The Indo-Gangetic plains.
3. The Deccan or Plateau of the south.

The *Himalayan Region* stretches from western limits of Kashmir in the west to Burma in the east, a distance of 2,000 miles with an average width of nearly 200 miles, forming a natural barrier to the north. The Himalayas with Pamirs, Hindukush, Sulaiman etc. form a mountain wall shutting off Indian sub-continent from the rest of Asia. The Himalayan region acts as a natural protective wall and provides rain water for the plains by arresting the moisture-bearing clouds of south-west monsoon. During winter it obstructs cold winds of Central Asia from coming to Indian sub-continent. The region contains rich animal and forest resources.

The Indo-Gangetic plain consists of alluvial deposits and lies between the Himalayan region of the north and the Deccan of the south. The plain covers an area of 300,000 sq. miles and economically the most developed and fertile region. As the name indicates, the plain has two great river systems, the Indus and its tributaries and the Ganges and its tributaries. A third great river, the Brahmaputra, cuts through the Himalayas near their eastern end and joins the Ganges to form a great delta. The land drained by these rivers is alluvial and forms the most fertile region in India.

The Deccan—From the river-plains on the north and from the coast-plains on the east and west of Peninsular India, there rises a great three-sided plateau called the Deccan. It begins at Vindhya mountains in the north and other two sides are known as Western Ghats and Eastern Ghats. This region is quite unlike the low-lying Indo-Gangetic plain. It is not smooth and flat but a table-land raised from 1,000 feet to 3,000 feet above sea level and broken up into many river valleys which run seawards among ranges of hills.

CLIMATE AND RAINFALL

Spreading as she does for nearly 2000 miles from the sub-tropics in the south to the freezing north, India has a varied climate. The weather changes seasonally and from region to region.

As the greater part of the country lies within the Tropics, the climate is tropical; high temperatures being the rule in the low-lands, lower temperatures in the high-lands. The rainfall is determined to a great extent by the monsoon. So dependent is India on this annual rainfall that variations from year to year mean prosperity or disaster for millions. There are two such currents, the *South-West monsoon* and *North-East monsoon.* The *South-West monsoon,* as it is called, strikes India about the middle of June. S.W. monsoon gives 90 per cent. of the total rainfall of India and affects the growth of nearly all her food crops. This monsoon reaches the country in two currents—Arabian sea current and the Bay of Bengal current. The former gives rain to Bombay, the Punjab, and a part of the Madhya Pradesh and the latter to the rest of India and to Burma.

The other current known as *North-East monsoon* is really South-West monsoon in retreat and flows from the land towards the sea. This current is the cause of wintry rains in Madras and the Punjab.

The different parts of the country receive rainfall in different degrees. Cherrapunji in Assam gets an annual rainfall of about 465 inches, whereas some parts of Rajputana and Eastern Punjab get annual rainfall less than three inches.

We can divide the country into four zones according to rainfall: (1) *Wet zone,* where minimum rainfall is 100 inches. This includes West Bengal, Assam and Western coast stripes. (2) *Intermediate zone* (zone of moderate rainfall) : it includes portions of Central India, Himalayas to Godavari river, east-coast of the peninsula and eastern side of the Western Ghat and up to Baroda, where rainfall between 40 inches and 80 inches. (3) *Dry zone,* where rainfall is less than 40 inches. (4) *Desert zone,* where rainfall is less than 20 inches, *i.e.,* Rajputana and East Punjab.

SOIL OF INDIA

Indian soil may be mainly classified under four different heads namely, (1) *alluvial soil,* (2) *black soil,* (3) *red soil* and (4) *laterite soil.*

The alluvial soil is very fertile and covers greater part of the northern India between the foot of the Himalayas and the northern slopes of the Vindhyas and extends in a narrow fringe round the coastline of the Peninsula. Territorially they occupy East Punjab, Uttar Pradesh, Bihar, West Bengal, Assam and some other areas in India.

Red soils cover the whole of Madras, Mysore and south-east Bombay and extend through the east of Hyderabad and Madhya Pradesh to Orissa and Chota Nagpur. Northwards the red soil extends into greater part of Sonthal Parganas and the Birbhum district of West Bengal, the Mirzapur, Jhansi and Hamirpur districts of the Uttar Pradesh, the Baghelkhand States of Central India, the Aravallis and the eastern half of Rajputana.

Black soil or black cotton soil is very suitable for cotton cultivation. The black soil covers nearly 200,000 square miles comprising Saurastra, Western Hyderabad, Western Madhya Pradesh, parts of Bombay. Black cotton soil is exceedingly compact and tenacious and sticky when wet. The water holding capacity of this soil is good. Cotton, jawar, wheat, linseed and gram are cultivated in these areas and the soil is rich in iron and aluminium but very poor in organic matter and other plant nutrients. These soils are present in Central India, West Bengal, and along the Western and Eastern coasts of Madras.

HIMALAYAN FRONTIER

The Himalayan range is an effective barrier against invasion or interference from the north. There are few usable passes leading from the plains, most of them serve as gateways of trade. In the Central Arc of the Himalayas there are some famous passes, but unfortunately they are very high and difficult to climb and snowbound for major part of the yaer. These are *Jelep La* north of Gangtok in Sikkim leading to Leh and *Shipki pass* from Simla to Manasarovar region.

The present north-west frontier of India is no longer the old traditional frontier which admitted all foreign invaders of India. After partition of India, the boundary of the new north-west frontier of India is about

200 miles long starting from the southern boundary of Kashmir up to the north-eastern limit of the Bahawalpur state.

India is separated from Burma by Patkai, Naga and Lushai Hill and by Arakan Yoma, so that overland route with India is scarcely resorted to though there are four main gaps—Tuzu Gap, Manipur Route, An Pass, and Taungup Pass. There are Zozila Pass and Karakoram Pass leading to Tibet from Srinagar.

COAST LINE

Coast line of India lacks in indentations and although about 2,500 miles in length, it has only four openings of importance into land, such as Runn of Cutch and Gulf of Cambay on west, the Gulf of Mannar between India and Ceylon and the head to the Bay of Bengal. The coasts are singularly free from islands and the sea round the coast of India is very shallow and the shores are usually flat and sandy. The West coast is rocky with mountains close to the sea. East coast is less rocky but the sea here is shallow, so that large ships cannot approach the coast.

RIVER SYSTEMS

(1) *Rivers of Northern India*—They all rise in the mountain wall or beyond it. The rivers are fed with waters from the gradual melting of snow. They do not depend entirely for their waters on the monsoon rains.

The three great river systems of Northern India are:—(*a*) *Indus* river with its five tributaries, *i.e., Jhelum, the Chenub, Ravi, the Beas* and *the Sutlej* (*b*) *Ganges* river with a course of fifteen hundred miles, drains Himalaya's southern slopes and with its tributaries, *the Jamuna, the Gogra, the Gondak, the Chambal* and *the Sone,* and enters Bay of Bengal through extensive deltas with multitude of channels; (*c*) *Brahmaputra* flows down through Tibet, Assam and Eastern Bengal and discharges its floods after a course of sixteen hundred and eighty miles into Bay of Bengal.

(2) *Rivers of Peninsular India*—They are quite different from the rivers of the Northern India. They rise in the hills of the plateau and they are fed only by monsoon rains. The rivers rise near Western Ghats, and flow towards Bay of Bengal. The most important are the *Mahanadi, Godavari, Kistna* and *Kavery*. In the north of the plateau two important rivers, *Narbada* and *Tapti* flow westwards.

FRONTIERS

At long last the geographical compactness within almost invincible frontiers has broken down in Indian Union. Only the Himalayas in the north and the Indian Ocean in the south stand as of old. The N. Western and the N. Eastern frontiers of Indian Sub-continent have now to be defended by two different dominions.

In consequence of the partition of India and due to the Dominion of Pakistan being sliced into two distinct and unconnected zones, the question of the defence of three now frontiers has arisen,—one separating the W. Pakistan from the Union of India and two on each side of the E. Pakistan. As for the present, Jammu and Kashmir have decided to remain within the Union of India, the N.-W. frontier of the Indian Union in question will meet the frontier of U.S.S.R. through Gilgit.

PORTS

India has very few natural harbours; because it is broken by very few inlets of the sea, the sea round the coast is very shallow and the shores are usually flat and sandy. Except Bombay, Okha and Cochin, all other ports in Western India coast are virtually inaccessible during the monsoon. The eastern coast of India is surf-bound and has no natural harbour. Calcutta is about 90 miles from the sea and the formation of sand banks in the Hooghly has made Calcutta as dangerous a port.

The principal ports of India are Bedi Bunder, Oka, Porbandar, Surat, Bombay Marmugoa, Mangalore, Calicut, Cochin, Alleppey, Quilon, Tuticorin, Dhanushkadi, Negapatam, Karikal, Cuddalore, Pondicherry, Madras, Masulipatam, Cocanada Vizagapatam, Calcutta. Of these Karikal and Pondicherry belong to France and Marmugao belongs to Portugal. Bombay, Visakhapatnam, Madras, Cochin and Calcutta are termed 'major ports' of India.

POPULATION

According to the provisional census figures of 1951 the population of India is 356,891,624 excluding Jammu and Kashmir and Part B Tribal areas of Assam which is an increase of 13·5 p.c. over the corresponding figure of 1941. The total land area covered by the census is 1,138,614 sq. miles. It includes all Part A. B, C states and Part D territories excepting Jammu and Kashmir and Part II Tribal areas of Assam. In respect of area Madhya Pradesh is the biggest state with a land area of 130,323 sq. miles. Next comes Rajasthan with a land area of 128,424 sq. miles. As regards general population, Uttar Pradesh has got the highest number with a total of 62,254,118. Next comes Madras with a population of 56,952,332.

The India's total population of 361·25 millions (including Kashmir and tribal areas of Assam) is the second highest in the world, China leading with a population of 463·50 millions. India's population constitutes 15·1 per cent of the total world population as against China's 19·4 per cent. The density of population for whole of India according to 1951 census is 296 per square mile.

INDIAN RACES

During the British period the first official enumeration of the people of India was made by Sir Herbert Risley which was an official pronouncement accepted very largely both in India and outside India, though it is now regarded as arbitrary classification based on insufficient data and immature science. Indian races were divided into seven broad groups, such as *Mongoloid, Indo-Aryan, Dravidian, Mongolo-Dravidian, Aryo-Dravidian, Scytho-Dravidian* and *Turko-Iranian.*

Next classification was made by Dr. J. H. Hutton in 1933 based on race-cum-language-and-culture sequence. According to this theory all people came to India from outside such as—

(1) *Negritos* from Africa, the oldest people to have come to India now surviving in the Andaman Islands and in Malaya. Traces of them seem to occur among the Nagas in Assam and in certain tribes in South India.

(2) *Proto-Australoids*—who came from the East Mediterranean area.

(3) *Early Mediterranians*—who brought earlier forms of the Austric speech.

(4) *Civilised or Advanced Mediterranean*—who became Dravidians in India.

(5) *Armenoids*—a specialised offshoot from the standard Alpine stock probably came with the civilised Mediterraneans (Dravidians) and spoke their language.

(6) *Alpines*—found in Gujarat and Bengal; earlier than Vedic Aryans but probably speaking Aryan dialects.

(7) *Vedic Aryans or Nordics*—who brought the Vedic Aryan (Sanskrit) speech.

(8) *Mongoloids*—Not important for the greater part of India as they touched only the northern and eastern fringes.

The most recent and authoritative classification has been made by Dr. B. S. Guha, Director of Anthropology who divides the people of India into six main races with nine sub types.

(1) *Negrito*—is now almost extinct in India, a small group is still surviving in Andamans and its traces have been found among Kadars and Palayans of Cochin and Travancore Hills, Irurals of the Wynad, the Angami Nagas of Assam and some of the Rajmahal Hill tribes of Bihar.

(2) *Proto Austroloids*—seem to have come from the West. They survive in a good many aboriginal peoples of the present day India, although more or less mingled with other people. A branch of the Proto Austroloids passed on to Australia in recent times. Throughout the greater part of India, the Proto-Austroloid peoples still live as the lower castes or sections of the Indian people.

(3) *The Mongoloid Group*—is divided into (1) Palaeo-Mongoloids consisting of long headed and broad headed types. They form a dominant element in the tribes in Assam and the Indo-Burmese frontier and among the less primitive types in Burma and in Chittagong hills. (2) Tibeto-Mongoloids are found in Sikkim and Bhutan.

(4) *Mediterranean Group* consisting of (*a*) Palaeo-Mediterranean, medium statured, dark skinned and slight built, found in Kannada, Tamil and Malayalam tracts. (*b*) Mediteranean, true European type found in the Punjab, Upper Gangetic Valley and is supposed to represent civilised pre-Aryan Dravidian people of Northern India, who contributed largely to the evolution of Hindu people and culture of North India. (*c*) Oriental Type, sometime called Semitic or Jewish, found in the Punjab, in Sind, in Rajputana, in Western U.P. and in some other parts of India.

(5) *Western Brachycephals* consisting of (*a*) Alpinoid, (*b*) Dinaric and (*c*) Armenoid. They seem to have evolved in the Central Asian mountain regions and both Alpine and Dinaric varieties appear to have spread over the greater part of India, *i.e.,* Bengal, Orissa, Kathiawar, Kannada and Tamil countries, Gujarat, West coast of India excepting Malabar. The Parsis of Bombay are allied to Armenoids.

(6) *Nordics* are the Aryan speaking group of India who are responsible for India's Hindu civilisation and seem to have come from the Eurasian steppe lands and entered India during the second half of the second Millennium B.C. The Nordic elements are strong in North West Frontier of India, in the south of Hindu-Kush Range. Nordic elements are present in mixed form in Punjab, Rajputana, Upper Ganges Valley. They are also found among higher castes and groups and also Nordic type predominates in certain sections in India.

Lastly the author of this classification Dr. B. S. Guha has however stated, "It must be clearly understood that no rigid separation is possible as there is considerable over-lapping of types."

AGRICULTURE

Indian Union is a land of peasants, living dangerously near the margin of subsistence. The rural population is 87 per cent. of the total population, out of which 70 per cent. is engaged in agriculture. In India no homogeneous agricultural system can be adopted due to regional peculiarities. The cropping and agricultural practices vary to such an extraordinary degree that no general principles can be adopted. The output per acre in India compares unfavourably with any other country. The main food crops grown in India are rice, wheat, gram and jawar-bajra which account for about 80 per cent. of her total production of food grains.

The Indian Agriculture furnishes means of subsistence of one-seventh of the human race. It leads the world in jute, lac, tea, groundnut, cane sugar. Her position as regards rice, linseed, millet, is almost supreme in the world. The chief agricultural products of India are—rice, wheat, millets, pulses, gram, cotton, sugarcane, indigo, groundnut, linseed, castor, sesamum and oilseeds, jute, tobacco, tea and coffee.

The agriculture in India is a seasonal industry. There are two principal cropping seasons—*kharif*, the summer rain cultivation and *rabi*, the winter rain cultivation. *Kharif* crops are sown with the outbreak of monsoon and harvested in September or October.

ANIMALS

Indian climatic conditions have naturally developed a great variety of animal life and the number of animal species found in India is much greater than that in Europe.

In India, animals are chiefly seen in the valleys of the Himalayas (*i.e., Terai Forests*) extending from Kashmir to the Brahmaputra valley, on the Eastern and Western Ghats and in the jungles of Madhya Pradesh and Central India. There is a big game reserve forest at Khijiranga in Assam which preserves Indian rhinoceros.

(1) *Wild Animals—lion* is almost extinct and is now preserved in the Gir of Kathiawar. *Tigers* are found all over India. *Leopards* (hunting leopards), *Panthers, Cheetahs* are common in the hills and plains. *Hyeanas, foxes, wolves, jackals and wild cats* are available everywhere. *Elephants* are found in the lower Himalayan valley, the Brahmaputra valley and forests of Nilgiri hills. *Bears* are available on the hills everywhere. *Deer* and *antelopes* are commonly seen in the plains.

Yaks are only seen in higher Himalayas. *Rhinoceros* live in the swamps of Assam, North Bengal, Nepal. *Monkeys, Porcupines, Hares, wild Hogs* are to be seen everywhere.

(2) *Domestic Animals—goats, sheep, horses, ponies, asses, mules, bullocks, buffaloes* are available here and there. *Camels* are seen in the desert districts or Rajasthan, and East Punjab.

(3) *Birds*—Vultures, kites, hawks, wild ducks, wild geese, patridges pigeons, parrots, cranes, peacocks, snipe and sand grouse are available everywhere. Birds in India, as in most hot countries, are more famous for their plumage than for their song.

(4) *Reptiles*—Crocodiles are seen everywhere. The deadly snakes of India are *Cobras, Russel's Vipers, Keraits, Hamadryeds.*

(5) *Fish*—Most numerous fish are of carp family. The finest fish from angler's point is *Masher* found in all streams. The richest and tasty fish of India is *hilsa.* Fishing waters, river and sea, of Bengal and Madras are among the most extensive in the world.

FORESTS

India has been divided into three botanical areas and six provinces for the proper study of vegetation of India. The three botanical areas are (a) *Himalayan*—represents a rich, tropical, temperate and alpine flora with forests of conifers, oaks, rhododendons and a profusion of orchids (b) *Eastern*—consisting of a few conifers, many oaks and palms with a greater preponderance of orchids and (c) *Western* which has only one conifer, few palms and very small orchids without any oak.

These three areas are divided into six botanical provinces based on their climate and physical characters, namely (1) Eastern Himalaya (2) Western Himalaya (3) Indus plain (4) Gangetic plain including Sunderbans (5) Malabar (6) Deccan—each with its peculiar flora.

The forest vegetation of India is divided into five types according to the variation in climate, altitude and habitat, such as—(1) *Evergreen* (2) *Deciduous* (3) *Dry* (4) *Hill* (5) *Tidal or Littoral.*

The forests in India covers 15 p.c. of the land and supply valuable timber, firewood, essential oils, resin, turpentine, lac, dyeing material, myrobalans, sources of paper pulp and other materials of commerce and industry. The chief forest products of India are—teak, sal, deodar, chir, sheeshum, many species of bamboo, leaves, fruits, fibres, grass, gums, resin, barks, etc.

INDIAN FACTS IN A NUTSHELL

POPULATION

Every seventh man in the world is an India.

* * * * *

India's total population of 361·25 (including Kashmir and Tribal areas of Assam) according to 1951 census is the second highest in the world, China leading with a population of 463·50 million.

* * * * *

The density of population per sq. m. in Indian Union 296 according to 1951 census.

* * * * *

The U.P. has always had more large towns than any other province.

* * * * *

India's population constitutes 15·1 per cent of the total population of the world population against China's 19·4 per cent.

* * * * *

The increase in population of India in 1951 over 1941 is 13·4 per cent.

* * * * *

In respect of population of States, Uttar Pradesh has got the highest number with a total of 63·25 million. Next comes Madras with a population of 56·95 million.

* * * * *

Total land area of India covered by 1951 census is 1,138,814 sq. miles.

* * * * *

India's 75 cities have a population of a lakh or over and contain 24,085,169 people.

* * * * *

Statewise, Punjab has got the highest population of displaced persons with a total of 2,468,491; West Bengal closely follows with a total of 2,117,896 according to 1951 census.

AGRICULTURE

India is mainly an agricultural country; Seventy per cent of the population is supported by agriculture.

* * * * *

India is one of world's leading producers of commercial crops and they form the bulk of country's export trade.

* * * * *

India is the world's largest producer of oilseeds and tea and second largest grower of tobacco.

* * * * *

Food crops occupy 80 p.c. of the cultivated land and the rice is the premier food crop.

* * * * *

India is one of the most fertile lands in the world. But the average yield of every crop per acre is not only the lowest in the world but the figures are tragic. The average rice yield per acre, for example, of India, the U.S.A., Japan, Egypt and Italy are respectively about 731 lbs., 1,480 lbs., 2,307 lbs. and 3,000 lbs.

* * * * *

India's rich forests grow nearly 4,000 varities of fine timber useful for almost every need. Some of the woods of international reputation are teak, rose-wood, ebony, sandal wood, deodar and sheesam.

* * * * *

India has now the largest irrigation works and the longest mileage of canals in the world.

* * * * *

India has more than a third of world's total cattle, *i.e.,* about 255 millions. But India's cattle are worst of the lot, and they are fit only, as they do, to produce for India the largest amount of cattle hides. Besides low fertility, the major defect of Indian cattle is that an Indian cow on the average yields a little bit over 2 lbs. of milk a day compared to Holland's 20·5 lbs., England's 15 lbs. and New Zealand's 14 lbs.

* * * * *

The chief crops of India are rice, wheat, sugarcane, tea, cotton, jute, linseed, groundnut, coffee and rubber.

* * * * *

India produces one-third of the rice production of the world. She is second only to China.

* * * * *

India is the largest producer of oil-seeds like groundnuts, linseeds and castor seed.

* * * * *

India today is one of the largest producers of sugar, 80% of which is produced in the two States of U.P. and Bihar. But the per capita consumption of sugar in India is the lowest in the world.

* * * * *

In tea-production and export India ranks first in the world. 76% of the total area under tea in India lies in Assam and the two contiguous districts of Jalpaiguri and Darjeeling in N. Bengal.

* * * * *

India has the largest monopoly of lac production in the world.

* * * * *

India ranks first among the world's tobacco producers; but the quality of tobacco produced is generally not very fine.

* * * * *

India is the second largest cotton producing country in the world.

* * * * *

After the U.S.A. India is the largest producer and exported of raw cotton. Over 80% of the raw cotton used by the Indian cotton textile industry is in India.

* * * * *

MINERALS

India is the main source of the world's supply ilmenite, manganese, monazite, zircon and mica.

* * * * *

India has the biggest reserves of manganese ore of which the Madhya Pradesh is the largest producer and supplies more than 60% of India's total output.

* * * * *

India is the largest producer of mica, contributing about 70 per cent of the total output. Bihar supplies about 80 per cent of India's total production.

* * * * *

Indian iron ore has the highest metal content (about 55 to 70 per cent) which makes the production cost of pig iron the lowest in the world.

* * * * *

Next only to the U.S.A. and France, India has the largest reserves of iron ore of which she is the largest producer in the British Commonwealth of Nations, and stands ninth in the world.

* * * * *

The annual consumption of salt in India is estimated at 530 lakh tons which means that per capita consumption of salt is one of the lowest in the world. But India's production is not sufficient for even the present rate of consumption, and the production is only ¾ of her needs.

* * * * *

India produces annually about 3,50,000 ounces of gold value at about Rs. 3 crores.

* * * * *

India stands 12th among the petroleum producing countries of the world, and the average production per year is about 0·62¾ of the world output.

* * * * *

Coal is easily the most important mineral of India.

TRADE & INDUSTRIES

India is one of the largest industrial countries of the world; but industry gives occupation to only about 8% of the total population of India, and the pressure on land is very great.

* * * * *

India ranks fifth in the world in volume of trade. Raw materials take the biggest place in the export trade, of which jute, tea, cotton, skin and rice form half. About 75% of the imports came from Britain.

* * * * *

India comes to be ranked among the first ten industrial countries of the world.

* * * * *

Indian film industry is the second largest in the world.

* * * * *

Indian textile industry is the leading industry of India: India's tea, sugar, match and vegetable oil industry are among the biggest in the world.

* * * * *

Sugar takes the third place among Indian industries.

* * * * *

Tata Iron and Steel works at Jamshedpur are now the largest steel works in the East.

* * * * *

The Indian railway system constitutes a great capital undertaking by the State, the capital at charge being about Rs. 755 crores.

PUBLIC HEALTH & HYGIENE

The expectation of life of male in India is only 26·91 and in case of female it is 26·56.

* * * * *

200,000 mothers die of childbirth every year in India.

* * * * *

Malaria is the largest public problem in India. Death from this disease number about a million and a quarter every year, and the number of cases is about 1,000 million per year.

* * * * *

There are only one doctor for every 6,000 persons in India against one for every 1000 in Britain. In India 90% of the people live in villages but 90% of the doctors practise in towns.

* * * * *

It has been estimated by certain authorities, that 30% of the population in normal times do not get enough to eat—vide *Famine Commission's Report,* Vol. II, 1945.

* * * * *

At least 500,000 people die of tuberculosis every year in India and that at least five times this number are infected by the disease.

* * * * *

Every year 62 lakhs of people of India die from disease—36 lakhs from fevers, 5 lakhs from tuberculosis, 3 lakhs from dystentery, half a lakh from cholera and so on.

* * * * *

30 per cent of the people of India do not get enough to eat, and another 30 per cent eat the wrong food and are thus under-nourished.

* * * * *

30,000 death occur in India due to snake-bite.

* * * *

70,000 people die annually due to small-pox.

* * * *

Plague takes a toll of 20,000 death each year.

* * * *

Out of 1,000 mothers in India who give birth a child, 20 die.

* * * * *

Infant mortality rate in India is now 160 out of every 1,000 children.

INDIAN INFORMATION

INDIAN STATES

Part A Indian States (Under a Governor)

	Sq. miles	*Population*	*Capital*
Madras	126,166	56,952,332	Madras
Bombay	76,443	35,943,559	Bombay
West Bengal	29,066	27,786,683	Calcutta
Uttar Pradesh ..	107,141	63,254,118	Lucknow
Punjab	37,058	12,638,611	Simla
Bihar	69,745	40,218,916	Patna
Madhya Pradesh ..	98,600	21,327,898	Nagpur
Assam	50,296	9,129,442	Shillong
Orissa	32,198	14,644,293	Cuttack

Part B Indian States (Under a Rajpramukh)

	Sq. miles	*Population*	*Capital*
Saurashtra	21,062	4,136,005	Rajkot
Madhya Bharat ..	46,710	7,941,642	Gwalior-Indore
P. E. P. S. U. ..	10,999	3,468,631	Patiala
Rajasthan	128,424	15,297,979	Jaipur
Travancore-Cochin ..	9,155	9,265,157	Trivandrum
Hyderabad	82,258	18,652,964	Hyderabad
Mysore	29,458	9,071,678	Bangalore

Part C Indian States (Under a Chief Commissioner)

	Sq. miles	*Population*	*Capital*
Himachal Pradesh ..	10,600	989,437	Simla
Bilaspur	453	127,566	Bilaspur
Kutch	8,461	567,825	Bhuj
Bhopal	6,921	838,107	Bhopal
Tripura	4,049	649,930	Agartala
Manipur	8,620	579,058	Imphal
Delhi	574	1,743,992	Delhi
Ajmer	2,400	692,506	Ajmer
Coorg	1,593	229,255	Coorg
Vindhya Pradesh ..	24,610	3,597,431	Rewa

Part D Indian States

	Sq. miles	*Population*	*Capital*
Andamans & Nicobars ..	3,143	30,963	Port Blair
Sikkim	2,745	135,646	Gangtok

INDIAN BRIDGES

	feet		*feet*
Sone Bridge (1900) ..	10,052	Hardinge Bridge (girder)	5,380
Godavari Bridge ..	9,096	Mahanadi Bridge ..	6,912
Willingdon Bridge ..	2,610	Jubilee Bridge ..	1,213
Gorai Bridge ..	1,744	Meghna Bridge ..	1,213
Howrah Bridge* (1943) ..	2,150		

---

* Largest cantilever span bridge in India and the third largest cantilever bridge in the world.

Oldest Iron Bridge in India

Old Iron Bridge over the river Gumti, Lucknow.

SOME INDIAN FLAGS

Indian Union Flag: Tricolour of green, white and saffron with chakra in the centre.

Congress Flag: Tricolour of green, white and orange with charkha.

Muslim League Flag: Bright green and is embossed with a white crescent and star, the emblem of Islam.

Flag of Hindu Mahasabha: Deep orange and is embossed in crimson, with a sword, a cobra entwined with lotus flowers and the Hindu Swastika.

Flag of Indian Communist Party: Red flag embossed with hammer and sickle.

DISTANCES BY RAIL

	Bombay.	*Calcutta.*	*Madras.*
Agra ..	835	790	1239
Ahmedabad ..	306	1328	1100
Allahabad ..	845	512	1484
Ambala ..	984	1025	1481
Bangalore ..	745	1245	222
Banaras ..	928	429	1461
Bombay ..	—	1223	794
Calcutta ..	1223	—	1032
Kanpore ..	840	630	1602
Darjeeling ..	1611	388	1420
Dibrugarh ..	2051	828	1860
Gaya ..	1057	292	1324
Delhi ..	845	902	1361
Hyderabad (Dn.)	491	987	373
Jubbulpore ..	616	733	1263
Jodhpur ..	1206	1131	1580
Madras ..	794	1032	—
Madura ..	1099	1337	305
Lucknow ..	885	616	1386
Mathura ..	868	823	1272
Nagpur ..	520	703	682
Poona ..	119	1342	675
Ranchi ..	1447	251	1283
Saharanpur ..	974	938	1430
Trichinopoly ..	1003	1241	209
Vizagapatam ..	1277	1515	483
Simla ..	1301	1342	1798

ATTEMPTS ON EVEREST

	ft
Mt. Everest—highest point reached by Rutteledge Expedition	27,400
Everest—C. G. Bruce and G. I. Finch (1922) ..	27,800
Everest—E. F. Norton and T. H. Sommervell (1924)	28,200

CONQUEST OF HIMALAYAN PEAKS

	ft.
Trisul by Longstaff (1907)	23,360
Do. by Oliver (1933)	
Do. by Indian Expedition (1951)	
Jonsong Peak by Prof. Dyhrenfurth (1930) ..	24,344
Ramthang Peak by Prof. Dyhrenfurth (1930) ..	23,200
Mount Kamet by F. S. Smythe (1931)	25,447
Nanda Devi by Tilman Expedition (1934) ..	25,645
**Annapurna* by French Expedition leader, M. Hertzog (1950)	26,492
Tirich Mir by Norwegian Expedition (1950) ..	25,263

---

* Highest peak ever reached by man.

CHANGED NAMES OF INDIAN PLACES

Old Names	*New Names*
Calicut	Kozhikode
Cawnpur	Kanpur
Muttra	Mathura
Benares	Banaras
United Provinces	Uttar Pradesh
Central Provinces	Madhya Pradesh

Old Names	*New Names*
Ajmer-Merwara	Ajmer
Vizagapatam	Visakhapatnam
Bezwada	Bijayawada
Trichinopoly	Triuchirapally
Ganges	Ganga
Mihijam	Chittaranjan
Madura	Mathurai

INDIAN FELLOWS OF THE ROYAL SOCIETY

A. Carsetji.
S. Ramanujam.
Sir J. C. Bose.
Dr. Megnad Saha.
Sir C. V. Raman.
Dr. Birbal Sahani.
Dr. K. S. Krishnan.
Sir S. Bhatnagar.
Dr. H. J. Bhabha.
Prof. S. Chandrasekhar
Prof. P. C. Mahalanobis.

INDIANS IN THE BRITISH PARLIAMENT

Sir Muncherjee Bhowanagree (Conservative).
Dadabhai Naoroji (Liberal).
Sapurji Saklatvala (Communist).
Lord Sinha of Raipur (House of Lords).
Lord Sinha, Second Baron of Raipur (House of Lords).

INDIAN PRIVY COUNCILLORS

Rt. Hon. Ameer Ali.
Sir B. C. Mitter.
1921—V. S. Srinivasa Sastri.
1926—Lord Sinha.
1930—D. F. Mulla.
1931—Sir Shadilal.
1934—Sir Tej Bahadur Sapru.
1934—H. H. the Aga Khan.
1936—Sir Akbar Hydari.
1939—Dr. M. R. Jayakar.
1941—Sir C. Madhavan Nair.

INDIAN PEER OF THE BRITISH REALM

Sinha, Aroon Kumar (b. 1887).
Heir—Hon'ble Sudhindra Sinha (b. 1921).

INDIAN WINNERS OF VICTORIA CROSS

(1) World War I 1914—1918

Ishar Singh (*Naik*, 28th Punjabis) Waziristan, 1921.
Mir Dost (*Subadar*, Coke's Rifles) Great War, 1915.
Shahamad Khan (*Naik*, 89 Punjabis) Great War, 1916.
Chatta Singh (*Sepoy*, 9th Bhopal Inft.) Great War, 1916.
Darwan Singh Negi (*Naik*, 39th Garhwal Rif.) Great War, 1918.
Karnabahadur Rana (*Naik*, 23rd Gor. Rif.) Great War, 1918.
Khudabad Khan (*Naik*, 129th Balu) Great War, 1914.
Kulbir Thapa (*Rifleman*, 23rd Gor. Rif.) Great War, 1915.
Lala (*Lance-Naik*, 41st Dogras) Great War, 1916.
Govind Singh (*Lance-Dafadar*, 28th Lancers) Great War, 1918.
Badlu Singh (*Ressaldar*, 14th Cavalry) 1918.
Gabar Singh Negi (*Rifleman*, 39th Garhwal Rif.) Great War, 1915.

(2) World War II 1939—1945

2nd Lt. Premindra Singh Bhagat (*Indian Engineers*) Middle East, 1941.

Subedar Richpal Ram, 6th Rajputana Rifles (*Posthumous Award*) Middle East, 1941.

Havildar Prakash Singh, 8th Punjab Regiment, Arakan, 1943.

Havildar-Major Chhelu Ram, 6th Rajputana Rifles (*Posthumous*) Tunisia, 1943.

Lt.-Col. A. E. Cumming (12th Frontier Force Rifles, Indian Army), Malaya, 1942.

Havildar Gajee Ghale, 5th Royal Gorkha Rifles, Chin Hills, Burma, 1943.

Jem. Abdul Hafiz, 9th Jat. Regt. (*Posthumous Award*) Imphal, July, 1944.

Subedar Lalbahadur Thapa, 2nd Gorkha Rifles, Tunisia, 1943.

Rfn. Bhanbhogta Gurung, 2nd Gorkha Rifles, Burma, 1945.

Rfn. Lacchiman Gurung, 8th Gorkha Rifles.

Lt. Karamjit Singh, 4|5th Punjab Regiment (*Posthumous*), Burma.

Sepoy Namdeo Jadav, 1st Marhatta Light Infantry, Italy.

Sepoy Ali Haidar, 6th Frontier Force Rifles, Italy, 1945.

Major F. G. Blaker, 9th Gorkha Rifles.

Sepoy Kamal Ram, 8th Punjab Regt., Italy, 1944.

Naik Nand Singh, 11th Sikh Regt., Arakan Front, 1944.

Rfn. Ganju Lama, 7th Gorkha Rifles, Imphal, 1944.

Naik Agan Singh Rai, 5th Royal Gorkha Rifles, Bishenpur, Silchar, 1944.

Subedar Netra Bahadur Thapa, 5th Royal Gorkha Rifles (*Posthumous*), Bishenpur, 1944.

Naik Yeshwant Ghadge, 5th Mahratta L. I. (*Posthumous*), Italy.

Rfn. Tul Bahadur Pun., 6th Gorkha Rifles, Burma Front, 1944.

Rfn. Sher Bahadur Thapa, 9th Gurkha Rifles (*Posthumous*), Italy, 1944.

Jem. Ram Sarup Singh, 1st Punjab Regt., Burma (*Posthumous*).

Capt. M. Allmand, 6th Gorkha Rifles, (*Posthumous*).

Rfn. Thaman Gurung, 5th Royal Gorkha Rifles, Italy (*Posthumous*).

L. Naik Sher Shah, 7|16th Punjab Regiment, Burma (*Posthumous*).

Naik Gian Singh, 15th Punjabi Regiment, Burma.

Naik Fazal Din, 10th Baluch Regiment, Burma (*Posthumous*).

Hav. Umrao Singh, Royal Indian Artillery, Burma.

Sepoy Bhandari Ram, 10th Baluch Regiment, Burma.

WINNERS OF PARAM VIR CHAKRA

(*Republican India's highest decoration for gallantry*)

Major Somnath Sharma, 4th Bn. Kumaon Regt. (*Posthumous*).

L|NK Karam Singh, 1st Bn. Sikh Regiment.

2|Lt Rama Raghoba Rane, Corps of Engineers.

PRESIDENTS, LEGISLATIVE ASSEMBLY, INDIA

Sir Frederick Whyte (1920-25).
V. J. Patel (1925-30).
Sir Curimbhoy Ibrahim (1930).
Sir Sanmukham Chetty (1930-33).
Sir Abdur Rahim (1933-45).
G. V. Mavlankar (1946-47).

SPEAKER, CONSTITUENT ASSEMBLY OF INDIA

Dr. Rajendra Prasad 1947—1949

SPEAKER INDIA'S PARLIAMENT

G. V. Mavlanker 1950—

INDIAN NATIONAL CONGRESS PRESIDENTS

(First Sessions, 1885)

Presidents

1885—Bombay—W. C. Bonnerji.
1886—Calcutta—Dadabhai Naoroji.
1887—Madras—Badruddin Tyabji.
1888—Allahabad—George Yule.
1889—Bombay—Sir.W. Wedderburn
1890—Calcutta—Sir P. Mehta.
1891—Nagpur—P. Ananda Charlu.
1892—Allahabad—W. C. Bonnerji.
1893—Lahore—Dadabhai Naoroji.
1894—Madras—Alfred Webb.
1895—Poona—S. N. Banerji.
1896—Calcutta—R. M. Sayani.
1897—Amraoti—C. Sankaran Nair.
1898—Madras—A. M. Bose.
1899—Lucknow—R. C. Dutt.
1900—Lahore—N. G. Chandravarkar
1901—Calcutta—D. E. Wacha.
1902—Ahmedabad—S. N. Banerji.
1903—Madras—Lalmohan Ghose.
1904—Bombay—Sir Henry Cotton.
1905—Benares—G. K. Gokhale.
1906—Calcutta—Dadabhai Naoroji.
1907—Surat—Rash Behari Ghose.
1908—Madras—Rash Behari Ghose.
1909—Lahore—Pt. M. M. Malaviya.
1910—Allahabad —Sir W. Wedderburn.
1911—Calcutta—Bishen N. Dar.
1912—Patna—R. N. Mudholkar.
1913—Karachi—Nawab Saiyed Muhammad.
1914—Madras—B. N. Bose.
1915—Bombay—Sir S. P. Sinha.
1916—Lucknow—A. C. Majumdar.
1917—Calcutta—Dr. Annie Besant.
1918—Bombay (Spl.)—Hasan Imam.

Presidents

1918—Delhi—Pt. M. M. Malaviya.
1919—Amritsar—Pt. Motilal Nehru.
1920—Calcutta (Spl.)—Lala Lajpat Rai.
1920—Nagpur—C. Vijiaraghavachariar.
1921—Ahmedabad—Hakim Ajmal Khan.
1922—Gaya—C. R. Das.
1923—Delhi (Spl.)—Abul Kalam Azad.
1923—Cocanada—Mahomed Ali.
1924—Belgaum—M. K. Gandhi.
1925—Cawnpore—Sarojini Naidu.
1926—Gauhati—Srinivasa Iyengar.
1927—Madras—Dr. M. A. Ansari.
1928—Calcutta—Pt. Motilal Nehru.
1929—Lahore—Pt. J. L. Nehru.
1931—Karachi—Sardar V. Patel.
1932—Delhi—Seth Ranchhodlal.
1933—Calcutta—Mrs. Nellie Sen Gupta.
1934—Bombay—Rajendra Prasad.
1935—Lucknow—Pt. J. L. Nehru.
1937—Faizpur—Pt. J. L. Nehru.
1938—Haripura—Subhas Bose.
1939—Tripuri—Subhas Bose.
1940—Ramgarh—A. K. Azad.
1946—Pt. J. L. Nehru.
1946—Meerut—J. B. Kripalani (resigned).
1947—Dr. Rajendra Prasad.
1948—Jaipur—Dr. P. Sitaramiyya.
1950—Nasik—P. D. Tandon. (resigned).
1951—J. L. Nehru.

INDIAN POLITICAL PARTIES

Indian National Congress —With the dawn of Independence, the Congress has now become a purely political party. The object of the Indian National Congress as adopted in 1948 is now "the well-being and advancement of the people of India and the establishment in India by peaceful and legitimate means of a Co-operative Commonwealth based on equality of opportunity and of political, economic and social rights and aiming at world peace and fellowship."

All India Muslim League—Started in 1906 for securing special safeguards and privileges for Muslim; was successful in securing separate communal representation in 1909; put forward in 1940 the demand for Pakistan which has eventually been accepted; its success was due to its spreading two-nations theory which had to a great extent been responsible for its being able to bring within its fold as followers the majority of the Muslims in India. Had no definite political or economic objective, except the establishment of Pakistan. After the establishment of Pakistan, Muslim League has been split into two: Pakistan Muslim League and Indian Union Muslim League. In Pakistan it is the government party and India it is the 'opposition' party in some provincial legislature. The Indian counterpart has by resolution given up communal politics.

Communist Party of India—Founded in 1924, was declared illegal till 1943 when the ban was removed as the party declared its full support for the World War II. Once a left-wing party within the Congress, now disaffiliated due to the party's support for the war and its attitude towards the August Revolution. The party moulds its policy with reference to the policy of Russia in international affairs, rather than according to the conditions obtaining in India. They look to Russia for guidance and inspiration. The main principle of the party is the gaining of power for one class of society *i.e.,* the workers. It openly expresses its enemity to other classes and does not hesitate to use means to establish the dictatorship of the proletariat.

Socialist Party of India—formerly known as Congress Socialist Party, was started in 1934 within the Congress; but in 1947, it completely broke away from the Congress and dropped the word *Congress* from the nomenclature of the party. The object of the party as affirmed in Kanpur Conference of 1947 states—In the Socialist society of our conception, the individual, *i.e.,* the worker is free and the State has no power to deprive him of his rights and privileges except through the processes of law. The Trade Unions are free and may even exercise, if need be, their right to strike....other voluntary organisations of working men are also free. Political parties other than party in power may be formed and may function freely.... The State has no monopoly over the press, the radio or other means of propaganda.... In such a society, economic power, *i.e.,* the power to plan production, the power to determine the condition of work, prices, the distribution of the national produce—all these powers are held not exclusively by the State bureaucracy but shared by Trade Unions, co-operative and other suitable representative bodies of working men....."

Forward Bloc—came into existence in 1938 when Mr. Subhas Bose sought to rally leftists against the Congress orthodoxy. It favours a programme of direct action and repudiates all compromise. The party's objective now is the establishment of "Socialist State" in India with complete severence of relations from the British Commonwealth.

Forward Block (Marxist)—This is a group which has severed its connection with the parent body and has formed a new party on January 23, 1950. The Desh Sevak Party of Punjab has merged into it.

New Humanist Movement—A new movement formed by Mr. M. N. Roy after the dissolution of the Radical Democratic Party in Dec. 1948. The objectives of the party is "Radical Democracy" which will be attained through collective efforts of spiritually free men and women united in a political party with determination of creating a new order of freedom. The movement has been started not with the object of seizing political power, but with the object of educating the masses in their new ideology.

National Liberal Federation—was formed in 1908 when the moderates broke away from the Congress and formed a separate party. It advocated gradual progress through peaceful and constitutional means as opposed to the revolutionary creed and policy of the Congress. Their policy is very 'moderate' that it has never found support of the Indian masses. It represents a doctrine which has no place in a dynamic India. The Liberals are opposed to direct action of any sort. They are wedded to constitutional forms of agitation whatever they may mean.

Scheduled Caste Federation—Party was established by Dr. Ambedkar. It has no political or economic platform. It has centred all its agitation for demanding extraordinary privileges. After partition it has changed its outlook.

Hindu Mahasabha—aims at the creation of a millitant organisation of the Hindus for cultural, political and social uplift of the Hindus. In 1948, the Mahasabha has stated its new objective as "to establish Akhand Hindusthan, to establish a really democratic state in Hindusthan."

Democratic Vanguard—This party was formed in 1943 by those who seceded from the Radical Democratic Party. It's objects is the "attainment of the democratic revolution" in India.

Rastriya Swayam Sevak Sangh—It was started in 1925. Its objects are the military training of the Hindus, development of social consciousness and building up of character, and promotion of physical, intellectual and moral well-being of the Hindus and the establishment of Hindu Rashtra. The party has now stated its main objective as revival of Hindu culture.

Socialist Republican Party—was started by late Sarat Chandra Bose in 1948 with the object of complete independence of India free from all foreign influences. The setting up of Socialist Republic on the liguistic basis and the establishment in the country of a Union of Socialist Republics are the main objects of the party.

Sarvodaya Samaj—A fellowship of those who believe in the Gandhian ideals. It is not an organisation but a voluntary brotherhood of constructive workers who have faith in Gandhian ideals of truth and non-violence. Its central idea is the insistence on the purity of means in the same way as of ends. Khadi, Harijan uplift, service to Adibasis, leprosy relief work and promotion of communal harmony, form the main activities of Samaj.

Revolutionary Socialistic Party of India—Preaches Marxist doctrine and wants to establish a socialist state in India through revolution.

Revolutionary Communist Party of India—another Marxist party in India which calls itself Leninist, which characterizes Congress as bourgeois organisation. It is anti-Soviet with Tortskyite leanings.

Kishan Party—Is a peasant movement with socialistic outlook. Its programme is the amelioration of the Indian peasants. Though separate from the Congress, its programme is identical with Congress.

All India Muslim Majlis—Progressive Nationalist Party of Muslims, was opposed to Pakistan and supporters of Congress ideals.

Jamiat-ul-ulema-Hind—An organisation of Moslem divines and religious teachers. It has always supported the political programme of the Congress. It is a supporter of independence on religious grounds. It has now dropped its political programme.

Shia Political Conference—Represents Shia Moslems and is the most important minority among the supporters of the Congress.

Momin Ansar Conference—Its main policy has centred on opposition to Muslim League and to Pakistan. The Conference is the full supporter of Congress politics.

Krishak Praja Mazdur Party—The newly formed party in 1951 by Archarya Kripalani who has ceded from Congress to which large number of congressmen have joined. The object of the party is almost the same with the Congress, but it has come into existence mainly with the object of fighting in the Congress which has strayed away from its path.

People's Party—Formed by Dr. Shayama Prasad Mukerjee with the object of fighting the Congress in the general elections.

FIRST IN INDIA

Largest River—Indus.
Largest Lake—Wular Lake, Kashmir.
Highest Peak in India—Nanda Devi (25,660 feet).
Largest populated City—Calcutta.*
Highest Waterfall—Gersoppa Waterfall, Mysore, (960 ft. high).
Largest State (area)—Madhya Pradesh.
Largest Indian State—Jammu and Kashmir.
Wettest Place—Cherrapunji.
Densest Population—Bengal 779 per sq. mile.
Largest Forest Province—Assam.
Largest Delta—Sundarbans Delta (8,000 sq. miles).
Largest Cantilever Span Bridge—Howrah Bridge.
Largest Cave Temple—Ellora, Hyderabad.
Longest Corridor—Rameshwaram Temple Corridor (4,000 ft. long).
Largest Mosque—Jumma Masjid, Delhi.
Longest Bridge—Sone Bridge.
Largest Sugar-cane producing area—Uttar Pradesh.
Most literate parts of India—Travancore and Cochin.
Longest electric train—Bombay to Poona.
Highest Gateway—Buland Darwaja (Fatehpur Sikri, 176 ft. high).
Tallest Statute—Statue of Gomateswar (Mysore) 56 ft. high.
Longest Platform—Sonepur Platform (O. T. R.).
Longest Road—Grand Trunk Road (1,500 miles).
Highest Tower—Kutab Minar, Delhi.
Largest Dome—Gol Gambuz, Bijapur.
Largest Fair of Animals—Sonepur fair.
Longest Canal—in Nepal and Oudh and Rohilkhand.
Largest Zoo—Zoological Gardens, Alipur, Calcutta.
Largest Museum—India Museum, Calcutta.
Highest Populated State—Uttar Pradesh.

FIRSTS AMONG INDIANS

Indian Governor—Lord Sinha of Raipur.
F.R.S.—A. Carsetji, 1841.
Congress President—W. C. Bonnerjee.
Nobel Prize winner—Rabindranath Tagore.
I.C.S.—Satyendranath Tagore.
Bar-at-Law—G. M. Tagore.

---

* Population of Greater Calcutta—3,490,281.

Judge, High Court—Ramaprosad Roy.

Member, Viceroy's Executive Council—Sir S. P. Sinha.

Member of the India Council—K. G. Gupta.

Peer of the Br. Realm—Lord Sinha.

Wrangler of the Cambridge University—A. M. Bose.

Woman President of the Congress Mrs. Sarojini Naidu.

1st in I.C.S. Exam.—Sir Atul Chatterjee.

Member of the Br. Parliament—Dadabhai Naoroji.

Winner of the Victoria Cross—Khudadad Khan.

Member of the Privy Council—Ameer Ali.

Member of the House of Lords—Lord Sinha.

Commander-in-Chief—General Cariappa.

I.M.S.—Dr. Goodeve Chuckravarti.

Woman M.A.—Chandramukhi Bose.

Test cricket player—K. S. Ranjitsinjhi.

HILL STATIONS

Nainital—is a hill sanatorium in Kumaun Hills, picturesquely situated on the shores of a beautiful lake. A favourite summer resort. Altitude 6,350 ft. It is reached from Kathgodam on the O. T. Railway 22 miles distant.

Mussoorie—Is a hill sanatorium, on the southern slopes of the Himalayas, 14 miles from Dehra Dun. From Dehra Dun to Mussoorie by motor cars. Altitude 6,600 ft. above sea level. Nearest railways station is Dehra Dun.

Lansdowne—Is situated in Garhwal about half way between Mussoorie and Nainital. It commands a wonderful view of snows, the Badrinath block being nearest. It is reached by E. I. R. to Kotdwara *via* Najibabad junction and there is good service of motor cars, a distance of 26 miles; altitude 6,060 feet.

Almora—In Kumaun Hills. Altitude 5,500 ft. above sea level. Mean annual rainfall 45·55 inches; fine views of snow. From Almora some of the highest peaks of the western Himalayas can be seen against the horizon. The main attraction for hickers is the famous Pindari glacier. Almora to Pindari glacier is 6 miles. Nearest railway station is Katgodam.

Mount Abu—Is reached by a good motor road from Abu Road Railway station. The range is about 50 miles in circumference. The climate is very healthy and delightfully cool. The average temperature is 60.° Altitude 4,500 ft. above sea level. It is a place of pilgrimage for Jains, for here are celebrated Dilwara temples containing some of the first specimens of Jain carving in India, whilst the temples themselves are preminent alike for their beauty and as typical examples of Jain architecture.

Bangalore—The cantonment is the largest in South India. Altitude 3,000 ft. above sea level.

Coonoor—on the Nilgiri Hills in the Madras Presidency; Altitude 6,740 ft. above sea level. Nearest railway station is Coonoor. It is reached from Ootacamund by rail.

Gulmarg—is at a distance of 30 miles from Srinagar, and is one of the finest pleasure resorts of Kashmir, popular for skiing, trekking and other winter sports.

Dalhousie—Altitude 7,867 ft. above sea level and 51 miles from Pathankot railway station (E. P. Ry.) reached by motor road.

Darjeeling—Altitude 7,168 ft. above sea level, magnificent snow views of Mount Everest (29,002 ft.) and Kanchanjungha (28,104 ft.). The minimum temperature in winter is about 30°. It is the centre of a large tea district. It is 369 miles from Calcutta.

Kalimpong—Hill station near Darjeeling. It is also reached from Siliguri by motor (41 miles). 4,000 ft. high.

Mahabaleswar—Principal hill station of the Bombay Presidency and summer retreat of the Bombay Government. Altitude 4,500 ft. above sea level. Nearest railway station is Poona, 75 miles.

Matheran—Nearest hill station of Bombay. It is only 2,650 ft. high.

Kasauli—A cantonment and convalescent depot in the Simla district situated on the crest of a hill overlooking Kalka Valley, 22 miles from Kalka by motor road. Famous for Pasteur Institute, altitude 6,200 ft.

Kulu & Kangra Valley—lie at the foot of the Dhaula Dhar Range of the Himalayas. Kangra, Jogindernagar, Chamba, Dharamsala, Dalhousie and Kulu are some of the chief holiday resorts. Kulu and Kangra valleys are known for their orchards and tea plantations. The valley is about 4,700 ft. high. The main route is *via* Pathankot. The valley is called the Valley of the Gods due to every village having its own God.

Panchmarhi—in Hosangabad, Madhya Pradesh is 32 miles from Pipariya Station on G. I. P. Ry.; summer resort of the Government. The maximum height is 4,500 ft.

Kodaikanal—A hill station in Southern India on the upper range of the Pulney Hills in the Madura District. It is 7,000 ft. above the sea level. The nearest railway station is Kadaikanal Road.

Ootacamund—is the leading hill station of South India, situated in the heart of Nilgiris. Altitude 7,500 ft. above sea level. Mean annual day temperature is 57·50°F.

Ranchi—Altitude 2,100 ft. above sea level. Mean annual day temperature is 74·9°F. Nearest railway station is Ranchi.

Shillong—is on the Khasi and Jainti Hills. It is headquarters of the Assam Government. Altitude 4,980 ft. above sea level. Average temperature in midsummer rarely reaches 80°F. Cherrapunji, 30 miles south of Shillong holds the world record for rainfall, average 426 inches per annum (in 1861 the rainfall at Cherrapunji was 905 inches). Nearest railway station is Pandu (68 miles).

Simla—is perched on the spurs of the lower Himalayas at a height of 7,000 feet. It is reached by mountain railway connecting Kalka and Simla. Mean temperature is 55°F. and annual rain is 70″. It is now the capital of the Punjab and Himachal Pradesh.

Elevations of Leading Indian Health or Pleasure Resorts

	Feet		*Feet*
Nainital (U.P.) ..	.. 6,350	Lansdowne (U.P.)	.. 6,060
Mussoorie (U.P.) ..	.. 6,600	Kadaikanal (Madras)	.. 7,000
Mount Abu (Rajputana)	.. 4,500	Ootacamund (Madras)	.. 7,500
Almora (U.P.) ..	.. 5,500	Mahabaleswar (Bom.)	.. 4,500
Darjeeling (W. Bengal)	.. 7,168	Amarnath (Kashmir)	.. 13,000
Kalimpong (W. Bengal)	.. 4,000	Kasauli (Simla) ..	.. 6,200
Bangalore (Mysore)	.. 3,000	Metheran (Bom.)	.. 2,650
Coonoor (Madras)	.. 6,740	Panchmarhi (C.P.)	.. 4,500
Dalhousie (E. Punjab)	.. 7,867		

Shillong (Assam) ..	4.900	Srinagar (Kashmir) ..	5.250
Simla (E. Punjab) ..	7,000	Ranchi (Bihar)	2,100

PLACES OF INTEREST IN INDIA

Agra—Famous for Taj Mahal and Agra Fort which contain all the glories of Moghul Empire, such as Dewani Khas, Moti Masjid, Jasmine Tower, Dewani-i-am, also tomb of Akbar at Sekandra and Itmud-ud-Dowla.

Amarnath—Situated at a height of nearly 13,000 ft. in Kashmere where thousands of Hindus make pigrimage is August. There is a motor service from Srinagar upto Pahalgam (7,200 ft.), 60 miles from Kashmere where motor road ends. The cave is about 50 ft. high and 50 ft. deep, situated between two huge mountains known as Kailash and Bhaira. At the back of the cave are several ice stalagmites in the shape of *lingams*—the frozen image of gods Siva, Parvati, Kartik and Ganesh, all self-made images of ice.

Aurangabad—Famous district and town in the Nizam's State where world-renowned temples and monastic caves of Ellora and Ajanta are located. There is also the historical fort of Daulatabad, the Raoza which contains the tomb of the great Moghul Emperor Aurangazeb and the magnificent tomb of Auragazeb's wife, Bibi-ka-Naghara, replica of the Taj Mahal of Agra. From the city of Aurangabad all these places can be visited. It is a station on Nizam's State Railway and 71 miles from Manmad on G. I. P. Ry.

Amritsar—Famous for Sikh golden temple, the most secred to the Sikhs and the tank is called the pool of immortality. The pool is enclosed by a wide marble-paved quadrangle 204 ft. long with an archway over it. In the centre of the pool is the Temple, a square building with marble inlaid walls and dome-shaped roof, under which shaded by a silken canopy lies *Granth Sahib*, the holy book of the Sikhs. It is also famous for gold and silver thread, carpets, silks and *pashmina* materials. It derived its name from the sacred tank on which the golden temple is situated. The town stands on the main route of the E. P. Railway.

Ajmer—A city of antiquity and celebrity. Ana Sagar Lake is famous for its picturesque surroundings. The place is famous for Darga Khwaja Sahib, the tomb of the famous muslim saint Muin-ud-din Chishti. The shrine contains the large drums and candle-sticks taken by Akbar at the siege of Chitor and two mosques, one built by Akbar and the other by Shah Jahan. At seven miles distance, there is Pushkar, the most sacred lake of India. Ajmer lies on the B.B.C.I.R. between Delhi and Ahmedabad.

Buddha Gaya—Seven miles from Gaya is the sacred Buddhist site of Budha Gaya, where under a *bodhi-tree*, Buddha conquered Mara and attained Buddhahood. King Asoka erected a temple near the tree. The temple at Budha Gaya consists of a main tower, raising to a height of 180 ft. in the form of a slander pyramid.

Bhubaneswar—The new capital of Orissa Province; contains the famous *Lingaraj Temple*, *Mukteswar Temple* and *Parasurameswar Temple*, and other temples such as *Bhagavati*, *Parvati*, *Ananta Vasudeva*, etc. on the hills known as Udaigiri and Khandagiri, a few miles from Bhuvaneswar, are caves once occupied by Jain monks, containing remarkable carvings, the earliest of which date to the second century B.C.

Banaras—Sacred city of the Hindus, contains numerous temples. The view of the ghats is magnificent, close by is the famous Hindu University.

Six miles from the city is the Saranath where in the Mrigadava or Deer Park, Buddha first preached his doctrine.

Chittorgarh—Famous for the *Tower of Victory*—contains wonderful Rajput ruins. It is the old capital of Sisodhiya Rajputs, the proud descendants of the sun-god who now rule at Udaipur. The Tower of Victory was built by Rana Kumbha in commemoration of his many victories over Mughal invaders. It lies on the direct railway route from Ratlam to Ajmer.

Delhi—Capital of India since 1911, was the capital of seven Empires. Some of the famous relics are—Red Fort with Imperial Palace of Shah Jahan, two Audience Halls, Rangmahal, the Hamam, Pearl Mosque and the Mumtaz Mahal inside it, Jumma Masjid, Kutub Minar, Ferozabad, Indraprashtha, Tuglukabad etc. Other places of interest are Tomb of Humayun, famous mosques and historic city walls. It occupies a strategic position, standing at the head of the plains of the Ganges and the Indus, the headquarters of all important railway lines of India.

Fathepur Sikri—Short distance of 24 miles from Agra, founded by Akbar in A.D. 1569 in a lonely eminence on the spot where saint Salim Chishti foretold the birth of a son of Akbar. After Akbar's death, the city was deserted within fifty years of its foundation, the reason being lack of water. Interesting places are, imposing pile of great mosque measuring 542 ft. east and 438 ft. north and south, the tomb of Saint Sheikh Salim Chisti, houses of Akbar's wives, Miriam and Jodhbhai. *Panch Mahals*—the building of five storeys, Hiran Minar, Buland Darwaza, the famous sand-stone chamber of *Diwani Khas* etc. In the Pachisi Court, laid out in red sandstone squares, he used to play chess with slave girls as pieces. This is the city of sandstone, the specimen of the finest Mughal architecture.

Hampi (or Vijayanagar)—The ruins of this ancient city covering an extent of about 10 sq. miles on the south bank of Tungabhadra river near Hospet railway station on the Guntakul-Hubli section of the Southern Railway is a witness to the rise and fall of this forgotten Hindu Empire which is said to be the finest and the greatest in South India. Hampi is the ruins of Vijayanagar, the ancient capital of Vijaynagar Empire. The ruins are virtually a vast open-air museum of Hindu monuments in the Dravidian style of architecture.

Jaipur—The most typical Hindu city built of pink stone, was founded in 1728 by Sawai Jai Singh II. There is also the famous observatory built about 1718 by the Maharaja Sawai Jai Singh. *Hawa Mahal, Ram Niwas Gardens, Albert Hall and Museum* are the interesting places to visit. Seven miles from Jaipur is Amber, a deserted city with an old royal palace overlooking the lake at the entrance to a rocky mountain gorge where Rajput architecture can be seen at its best. Jaipur is famous for brass works, stone carving, ivory and sandalwood work, etc.

Jabalpur—616 miles from Bombay with an elevation of 1,362 ft. The Marble Rocks are situated 13 miles from Jubbulpur.

Kanyakumari—The temple of Kanyakumari (the Virgin Goddess) is situated at Cape Comorin. This is the apex of the Indian peninsula, where Bay of Bengal, Arabian Sea and Indian Ocean meet. This is one of the most picturesque spots of India.

Patna—is the capital of Bihar and it spreads eight miles along the Ganga. Things worth seeing at Patna are the huge beehive shaped Gola 90 ft. high and 420 ft. at the base. It was built at the time of Warren Hastings for the granary; Khuda Buksh Oriental Library is famous for its rare collection of Arabic and Persian manuscripts; the ancient city of Pataliputra lies buried under Patna which was once the capital of Chandragupta Maurya. It was also the capital of Asoka.

Madurai—was the capital of the Pandiyan kings and became famous in the 17th century under the Nayak kings. The huge temple of Madurai known as *Minakshi Temple* (Goddess with fish eyes) is the most famous of the South Indian temples and one of the finest edifices of Dravidian architecture. It is dedicated to Siva and his expouse Minakshi. The temple forms a parallalogram, 850 ft. by 750 ft. and is surrounded by nine gopurams one of which is 150 ft. high. The most elaborate stone carving is found in the Hall of a Thousand Pillars. The other important buildings are all associated with the name of Tirumala Naik whose palace is the perfect specimen of secular architecture in Madras State.

Pushkar—is famous for its lake and fair which is held in October-November. The lake is regarded as most sacred in India and the temple of Brahma close to the lake is supposed to mark the spot where the incarnation of the God took place.

Kashmir—Altitude varies from 5,000 to 6,000 ft. Srinagar is the summer capital. It is 5,200 ft. with an area 11 sq. miles; mean temperature in January and February is 25°F. Srinagar is now reached by motor road *via* Pathankot. Srinagar lies along the banks of Jhelum which is crossed by seven bridges. Kashmir has beautiful Mughal gardens built by the Mughal Emperors of Delhi, such as *Shalimar gardens, Nishat Bag, Nasim Bag* and *Chashme Shahi*. Following are the heights of some prominent places of Kashmir—Srinagar 5,200 ft.; Gulmarg 8,700 ft.; Phalgam 7,000 ft.; Amarnath 13,000 ft. Places worth seeing in Kashmir are—Phalgam 60 miles from Srinagar; Dal Lake; Amarnath—97 miles from Srinagar.

Lucknow—is the capital of Uttar Pradesh. The grandeur of the city dates from Asaf-ud-daula, the fourth Nawab. Lucknow is known as the city of gardens. Outstanding among its buildings are the great Imambara with a hall of 162 ft. long and 54 ft. wide, the Husainabad Imambara, Rumi Darwaza, Chattar Manzil and the Wingfield Park.

Nalanda—Nalanda University was founded in the epoch of the Gupta kings and became one of the largest universities of Asia. Hieum Tsang, the well-known Chinese traveller who studied at the university in the 7th century has left glowing accounts of its activities. It consisted of 10,000 scholars lodged in special hostels endowed by foreign kings. Instruction was provided in separate colleges with a vast library spread over three buildings. It flourished for 700 years until destroyed by fire by foreign invaders in the 12th century A.D. 29 miles. Eastwards on the road from Patna stands Bukhtiarpur. Here a road branches off due south to Bihar Sharif (19 miles) whence a smaller road leads to Nalanda station (6 miles). From the station to the excavation site is 2 miles. Throughout the distance of 56 miles from Patna, the roads are serviceable all the year round. The site has been excavated by the Archaeological Department of the Government of India.

Udaipur—is easily one of the most beautiful cities in India. The city is completely encircled by a bastioned wall to which there are five main gates or poles. It stands in a valley amid green hills on the banks of a large laks with little islands. On these rise from the water's edge marble palaces of pure white that glisten in the sunlight.

Poona—City is famous as having been the capital of the Peshwas' dominions. It is the seat of Bombay Government during monsoon.

Hardwar—It is situated at the place where the Ganges issues forth from the hills on its fertilizing career. *Hari-ki-Pari* is a place of worship, which is a footmark of Vishnu imprinted on a stone into the upper wall of the ghat.

Sarnath—is four miles outside Banaras. In the 'Deer Park' of Sarnath, Gautama Buddha preached his First Sermon on Nirvana. The ruins of monastaries built more than 1,500 years ago draw Buddhist pilgrims from all over the world. Here stands the famous Asoka Pillar of polished sandstone whose lion capital was adopted by the new republic of India as the state emblem. The museum of Sarnath contains many superb specimens of ancient art.

ARCHITECTURAL & HISTORICAL LANDMARKS—Hindu

Ajanta Frescos—Famous frescoes in the Buddhist caves of Ajanta, a village in Hyderabad State. It is reached by motor from Jalgaon station on G. I. P. Ry.—37 miles from the station. The caves of Ajanta consist of 24 monasteries and 5 temples, some of which are 2000 years old. They are excavated on a wall of almost perpendicular rock, 259 ft. high, sweeping round in a hollow circle and extending a third of a mile from east to west. These caves are situated in the horse-shoe valley. Frescoes are now ranked among the masterpieces of the world's art. The frescoes at Ajanta may be divided into narrative scenes, portraiture and decoration and illustration in the life of Buddha.

Ambar Palace—The deserted capital of Jaipur, where the Palace is considered to include the finest specimens of Rajput architecture.

Barhut—Central India. The sculptures on the stone railing surrounding the Barhut stupa (second century B.C.) represent, with most careful exactitude episode in the life of the Buddha and the former lives.

Buddhist caves at Karli—One of the most famous of rock-out temples. It is the largest and most harmonious. It dates from the first century B.C. It is 124 ft. long and 45 ft. wide internally.

Buddha-Gaya—The temple (200 ft. high) is built on the site of a shrine erected by the Emperor Asoka. It commemorates the moment when Gautama meditating under the trees of Bodhi attained enlightenment and quality of Buddha after seven years of mental conflict and penance.

Black Pagoda—Close to the sea-coast, north of Puri, stands the 700 years old Konark temple. Legend runs that the sun-god was once seen here rising out of the sea in his golden chariot. Where his shadow fell, devotees endeavoured to build a temple in the shape of the God's chariot, complete with twenty four wheels and seven horses. Though now partly in ruins, their symphony in stone still ranks as one of the India's greatest architectural splendours. 24 miles out of Puri, the road leading to Bhubaneswar, branches off at Pipli towards Konark, which lies 29 miles away. This road is motorable only between December and June. There is an inspection bunglow near the temple, but no refreshments are available.

Temple at Belur—situated in the Mysore State, the temple is one of those exquisite specimens of Hoysala architecture, built 900 years ago by the munificence of the Hoysala King, Vishnuvardhana. Ferguson says—

There are many buildings in India which are unsurpassed for delicacy of detail by any in the world, but the temple of Belur surpasses even these for freedom of handling and richness of fancy.

Dilwara Temples—Near Mount Abu, the principal hill station of Rajputana are the wonderful Dilwara Temples. Five in number, they date from the 11th, 12th and 13th century and are built entirely of marble. The carvings which decorate the interior walls and pillars of the temples are fantastically lavish, yet the general impression is one of perfect harmony. The Temples are the Vimala Shah, built in 1032 and the temple of the two brothers Vastupala and Tejpala built between 1197 and 1247.

Ellora Caves—Can be conveniently reached from Aurangabad on Nizam's State Railway and it is 71 miles from Manmad on G. I. P. Ry. The caves lie at a distance of 14 miles from Aurangabad. Ellora cave temples, 34 in number are perhaps the largest and most varied in India. There are three classes of caves, Hindu, Buddhist and Jain. Excavated in the scarp of a large rocky plateau, they are remarkable memorials of these great faiths. The most marvellous of all is the stupendous rock-cut temples of Kailasa, elaborately carved inside and outside. Hewn entirely out of solid rock, with its massive pillars and colonades, intricate gallaries, painted ceilings and huge sculptures, Kailasa is one of the world's wonders.

Gwalior Fort—is one of the most impressive strongholds of mediæval India. The ascent to the fortress is like that of some fabled palace of the Arabian Nights. Of the many palaces within the walls, the most splendid is that of the Man Singh.

Sanchi Tope—Famous Buddhist stupa in the Bhopal State, 25 miles from Bhopal. Stupa is a hemispherical monument of bricks or stones. Sanchi Stupa is one of the oldest (third—first century B.C.) and best preserved Stupas of India. Stupa stands on the top of a small hill and enclosed by the finest and oldest stone railing in India. The stupa is 120 ft. in diameter and 56 ft. high. The most striking features of the Stupa are the gates which face four cardinal points and measure 28 ft. 5 in. to the top of the third architecture and are profusely carved with scenes from Jataka stories.

Tower of Victory, Chitore—A famous Hindu monument raised by Rana Kumbha in 1450 to commemorate his victory over the combined armies of Malwa and Guzerat. It consists of nine stories and is 122 ft. high.

Golden Temple—At Amritsar, the famous Sikh Temple. The temple stands on a raised plinth 65 ft. square in the centre of the tank and is surrounded by verandas.

Gomateswara—Near the town of Sravana Belgola in the State of Mysore, is the giant figure of Gomateswara, the Jain sage. The figure is 57 ft. statue and is carved out of a single stone at the top of a hill. The image is probably 2,000 years old.

Sirguya Frescoes—Are the earliest dateable Indian paintings. These are a group of Buddhist frescoes (100 B.C.) on the walls of a cave in Sirguya in the Central Provinces.

Temple of Bhubaneswar—Near Puri, most famous of these are *Rajrani* and *Lingaraj* Temples. Rajrani Temple, erected in the 11th century is a gigantic tower covered with statues and surmounted by receding layers of stones, the whole inward-curving tower ending in a great circular crown and a spire. Lingaraj Temple is the most perfect example of north Indian architecture.

Kajuraho Temples—At Kajuraho in Bundelkhand are grouped about thirty temples dedicated to Siva, Vishnu or Jina. They date from about 950 to 1050. These temples are unrivalled for profusion of ornate detail. In the Kandarya Mahadeva temple, the largest of the group, the details of bewildering complexity are massed together to form a perfectly balanced unity.

Elephanta Caves—Saiva temples in Elephanta Island in Bombay Harbour contain an important Saiva rock-out shrine. The famous Trimurti figure of Siva is situated in a niche.

Gwalior Fort—The ancient city of Gwalior is dominated by its Fort, the most famous in India which crowns a precipitous ridge.

Sarnath—At Banaras, there is the great Buddhist Stupa, a stupendous stone structure 104 ft. in height and 93 ft. in diameter. It commemorates the fact that here Gautama Buddha preached his doctrine to his first five disciples.

Mahabalipuram—or Seven Pagoda is situated on the south coast of Madras. Its temples are bas-reliefs and are cut from living rocks. The most famous is the 'Descent of the Ganges'. This giant image dating from the seventh century is cut in a granite rock 90 ft. long and 43 ft. high. Another famous sculpture is "Vishnu reclining on the snake Ananta." "Arjuna's Penance" another bas-relief is the largest bas-relief in the world.

Temple of Sri Rangam—Two mile north of Tiruchirapalli, on an island formed by the bifurcation of the river Cauvery is Srirangam, famous for the temple of Vishnu which contains a hall of thousand columns and sacred shrine of Ranganathaswami.

Ramaswaram Temple—The magnificent temple in Ramaswaram is probably the most perfect specimen in existence of the mason's art in the Dravidian style. The holy town of Ramaswaram is built on an island in Palk Straits. The great temple is in the form of quadrangular enclosure 650 ft. broad by 1,000 ft. long. Its glory lies in its vast pillard corridors which extend to a length of nearly 4,000 feet.

Muslim

Fatehpur Sikri—Few miles from Agra stands the city of palaces built of red sand-stone by Akbar in 1569-1584. Most important piece of art is Buland Darwaja, 126 ft. high built in commemoration of the conquest of Khandesh.

Fort at Agra—Containing ruins of Pearl Mosque, Hall of Public and Private Audience, the Throne Palace, King's Baths, Hall of Mirrors, Jasmine Palace, Jasmine Tower.

Gol Gumbaz—At Bijapur, is the 2nd largest dome in the world. It was built in 1656 by Sultan Mohamed Adil Shah to be his last resting place. The 11 ft. wide world-famous whispering gallery hangs out in the interior of the building 109 ft. 6 ins. above the floor. The surface measurement of the dome including of four octagonal towers is 205 sq. ft. and the height of the building from the base to the apex of the dome is 198 ft. 6 in. The exterior diameter measures 144 ft. whilst interior diameter is 134 ft. 5 in.

Kutab Minar (290 ft. high) at Delhi—Is one of the masterpieces of Indian technology and art. It is the largest minaret in the world. It was built by Altamash in 1232 A.D.

Jumma Masjid—Known as India's finest and biggest mosque, Jumma masjid was built by the Mughal Emperor Shah Jahan at Delhi more than three hundred years ago. The masjid, raised on a lofty basement is 201 feet in length by 120 feet and is flanked by two minarets 130 ft. high.

Mausoleum of Sher Shah—At Sasaram, is a gigantic solid and masculine example of Moslem architecture.

Taj Mahal—Most famous tomb built by Shah Jahan in memory of his beloved wife—rises with its slender minerets in the midst of magnificent gardens. It is the result of collaboration between Indian, Turkish and European artists. The height of the dome is about 230 ft.

CONSTITUTION OF INDIA

PREAMBLE

The Preamble of the Indian Constitution resolves to establish a *"Sovereign Democratic Republic"*. This sovereignty will be vested in the people of the country. Being a democratic republican government, India will not be governed by a king but by the people's representative. The Preamble also refers to justice, liberty, equality and fraternity to which all Indians are entitled.

TERRITORY AND EXTENT

There are in India nine States, each with a governor as its head such as Assam, West Bengal, Bihar, Bombay, Madhya Pradesh, Madras, Orissa, Punjab and Uttar Pradesh—These are known Part A States of the 1st Schedule.

There are other 9 states and States Unions under a Rajpramukh. These are known as part B States of the First Schedule.

Third group of administrative units, known as Part C States eleven in number comprising small states and sub-provinces, otherwise known as Chief Commissioner's States.

CITIZENSHIP

The Indian citizens are as follows—(1) Those domiciled in India (2) Refugees who have migrated to India from Pakistan and (3) Indians overseas.

The first category includes following persons (*a*) resident of India who has his domicile in the territory of India, who or one of whose parents were born in this country or who has been ordinarily living in it for a period of five years from the day preceding the commencement of this constitution.

Second category consists of those who have migrated to India from Pakistan or who have come to India from Pakistan under permanent permits granted to them by the Indian authorities.

In the third category falls persons of Indian origin residing outside India. If they meant to retain their Indian citizenship, all they need to do is to apply for it.

In regard to citizenship, the Constitution deliberately adopts the principle of single citizenship for the whole of India. It means that no person is entitled to claim that he is a citizen of two countries.

FUNDAMENTAL RIGHTS

The Constitution of India makes a declaration of some fundamental rights which it guarantees against violation by the State.

The Constitution contains rights which are declared fundamental and justifiable. These fundamental rights have been classified under the following heads:

1. Right to equality.
2. Right of freedom.
3. Right against exploitation.
4. Right to freedom of religion.
5. Cultural and educational rights.
6. Right to property.
7. Right to constitutional remedies.

Right to Equality—Discrimination against any citizen on grounds of religion, race, caste, sex or place of birth is prohibited. In public employment, Constitution assures equality of opportunity for all. It has established social equality by abolition of title, local and foreign.

Right to Constitutional Remedies—The Constitution guarantees the right to every citizen to move the Supreme Court for enforcement of all fundamental rights. And for that purpose the Supreme Court is given general powers to safeguard these rights as well as the power to propose particular remedies, such as *habeas corpus*, *mandamus* etc.

Rights to Freedom—guarantees (*a*) Freedom of Speech and Expression, (*b*) to assemble peacefully and without arms, (*c*) to form associations or unions, (*d*) to move freely throughout India, (*e*) to reside and settle in any part of India, (*f*) to acquire, hold and dispose of properties, (*g*) to practice any profession, trade or business.

Religious Freedom—Subject only to public order, morality, health and some other essential provisions, all persons are equally entitled to freedom of conscience and the right to profess, practice and propagate religion freely.

Cultural and Educational Rights—The Constitution provides for the protection of the interests of linguistic, cultural and religious minorities and their right to establish and administer their own educational institutions.

Rights against exploitation—Traffic in human beings is declared punishable offence. So too is *begar* (forced labour except without payment) or any form of forced labour except compulsory service for the State for public purpose.

Rights to Property—No person shall be unlawfully deprived of his property, movable or immovable.

DIRECTIVE PRINCIPLES OF STATE POLICY

The word directive is used to lay down certain allocations to the future legislature and the executive showing the manner in which they have to exercise their authority. They are meant to be codes of constitutional propriety which will govern the future government in relation to the people. These principles are not enforceable by law. Following are some of the principles of policy which the State should secure—

1. Adequate means of livelihood.
2. Fair distribution of wealth.
3. Equal pay for equal work.
4. Prevention of exploitation of child and adult labour.
5. Right to work, to education and public assistance in certain cases.

6. Right to receive free and compulsory education within a period of ten years from the commencement of the Constitution for all children upto the age of fourteen.

7. Public assistance in case of unemployment, old age, sickness, disability, and other cases of deserved want.

8. The right to a living wage.

9. Conditions of work assuring a decent standard of life and full enjoyment of leisure and social and cultural opportunities.

10. Raising the level of nutrition and the standard of living of its people and the improvement of public health.

11. Promoting with special care the educational and economic interests of the scheduled castes and the scheduled tribes and other less favoured sections of the community and protecting them from social injustice and all forms of exploitation.

UNION EXECUTIVE

President—The President is the head of the Indian Republic. He is elected indirectly by an electoral college consisting of the elected members of both Houses of Parliament and Legislatures of the States.

The qualification of the office of the President (1) he should be a citizen of India (2) must have completed the age of 35 years; and (3) qualified for election as a member of the House of the People. He will not be eligible for election if he holds a job in Government, giving him financial rewards.

Term of office—The President holds office for five years and is eligible for re-election but he can resign and hand over the charge to the Vice-President.

Salary and Allowance—The President draws a salary of Rs. 10,000 and usual allowance.

Impeachment—The President can be impeached for the 'violation of the Constitution'. The procedure for impeachment is as follows—A charge can be brought against him in either House of Parliament. But it should be passed by a majority of not less than two-thirds of the total membership of the House. If such a resolution is passed by two-thirds majority, the President is forthwith removed from the office.

Vice-President—is the ex-officio Chairman of the Council of State. Any citizen of India aged thirty-five years and above and qualified for the membership of the Council of States can be elected to this office by both the Houses Parliament. When the President is ill, if he resigns or dies or is removed or is for any reason absent, his place will be taken by the Vice-President, till a new President is elected.

Council of Ministers—The Constitution provides that the President should have a *Council of Ministers* to assist him. This Council of Ministers is the real executive of the Indian Republic with President as its leader. This Council will "aid and advise" him in the exercise of his functions. The President appoints the Prime Minister and other members of the cabinet on the advise of the Prime Minister. The Ministers are collectively responsible to the Lower House. It is the duty of the Prime Minister to communicate to the President all the decisions by the cabinet. The Prime Minister provides the link between the Cabinet and the President.

The Ministers are required to take oaths of office and secrecy and their salaries and allowances will be determined by the Parliament.

Parliament—The Indian Parliament is bi-cameral because it has an Upper House and a Lower Houses. *House of the People* (Lower House) and *Council of States* (Upper House).

The *House of the People* will consist 500 members. These members are directly elected by the voters in the several states. Every adult or grown-up citizen of India is given the right to vote. The electoral constituencies are so divided that each member in this House represents not less than 500,000 and not more than 750,000 citizens. There will be no nomination to the House of the People. The normal life of the House is five years. The minimum age for membership is 25 years for the Lower House. The House of the People will elect a Speaker and a Deputy Speaker from amongst its members.

Council of States is a permanent body elected indirectly and has a maximum strength of 250 members but as nearly as possible one-third of the members shall retire every second year. Among these, 12 will be nominated by the President. The nominated members should be men of learning and wide experience such as artists, writers, scientists and social workers. A member of the Council of States must be a citizen of India and must not be less than 30 years of age. The Vice-President of India shall be ex-officio Chairman of the Council of States.

The Difference between House of the People and the Council of States is as follows—The difference is not merely in their size. The powers given to them are not the same. The function of both is to legislate but the greater part of this responsibility will be borne by the Lower House. A bill has to be passed by both the Houses before it becomes law. In case of a disagreement between the two Houses, a joint Session of the two Houses is summoned to resolve the dead-lock. The opinion of the Lower House will ultimately prevail owing to its numerical majority. But it is to be noted here that the procedure regarding dead-lock relates only to Bills other than money Bills, for, as regards *money bills* the provision of the constitution is that sole power shall belong to the Lower House. Money Bills cannot be introduced in the Council of States. They must as a rule, originate in the House of the People.

There is freedom of speech in Parliament, subject to certain provisions of the Constitution and rules and standing orders of the Parliament. No member of the Parliament shall be liable to any proceedings of the House. For a period of 15 years from 26th January, 1950, the business of the Parliament can be transacted either in English or Hindi, but after the end of 15 years, the business shall have to be conducted in Hindi alone.

UNION JUDICIARY

Supreme Court of India—There will be a Supreme Court of India and its seat will normally be in Delhi. The Supreme Court will consist of a Chief Justice who is appointed by the President. There shall be not more than seven other Judges but Parliament can sanction a larger number. The Judges of the Supreme Court are also appointed by the President in consultation with the Chief Justice. A Judge may hold office until he attains the age of 65 years.

The Supreme Court decides dispute between the Government of India and any State or States or between two or more States involving any question of law or fact. Civil and Criminal appeals of a certain kind from High Courts will also be heard by it. The Supreme Court is also competent to order the enforcement of Fundamental Rights. It has also Advisory Jurisdiction by which the President can refer to it any question of public importance. The law declared by it is binding on all courts of the country.

High Courts in the States—There shall be a High Court for each State. It shall consist of a Chief Justice and such other Judges as the President from time to time think fit. Every High Court has superintendence over all courts subordinate to it throughout the territory under the court excepting any court constituted for Armed Forces of India.

Subordinate Courts—Appointments, promotions and posting of District Judges shall be made by the Governor of the State in consultation with High Court of the State.

PUBLIC SERVICES

The Constitution provides for a Public Service Commission for the Union and one for each State; and it permits two or more States to have a joint public service commission. The main functions of the Union and State Public Service Commissions are to recommend candidates for appointment and to conduct examinations for recruitment to the Central and State Services.

ATTORNEY-GENERAL

For expert legal advice in the performance of its functions, the President appoints an Attorney General of India to tender legal advice to the Government of India and perform other duties of legal character.

COMPTROLLER AND AUDITOR-GENERAL

A Comptroller and Auditor-General shall be appointed by the President to perform all duties and exercise powers relating to the accounts of the Union and the States. This main duty is to keep careful watch on the finances of the Union and of the States and specially to see that the expenses voted by the Parliament or the Legislature of a State and laid down in the Appropriation Act are not exceeded or varied.

STATES

There are four categories of States (1) Part A States of the First Schedule namely *States which have Governors*. There are nine such States—Assam, Bihar, Bombay, Madhya Pradesh, Madras, Orissa, Punjab, Uttar Pradesh and West Bengal, (2) Part B States of the first schedule, namely *states which have Rajpramukhs*. There are such States—Rajasthan, Saurashtra, Madhya Bharat, Pepsu, Travancore-Cochin, Mysore, Hyderabad, Jammu and Kashmir, (3) Part C States consists of *Chief Commissioners States*, such as Bilaspur, Ajmer, Coorg, Delhi, Manipur, Tripura, Himachal Pradesh, Kutch, Vindya Pradesh. (4) Part D mentions only Andaman and Nicobar Islands under a Chief Commissioner.

PART A STATES

There will be a Governor for each State in whom all executive powers are vested. He is appointed by the President and holds office during his pleasure. Any citizen of India who has completed 35 years of age is eligible for the appointment as Governor. Governor holds office for a term of five years unless he resigns earlier. Besides official residence the Governor draws a salary of Rs. 5,000 per months and other allowances and privileges.

The Governor will be assisted by a *Council of Ministers* with Chief Minister at the head of the Council to aid and advice the Governor. The Chief Minister is appointed by the Governor and the other Ministers are also appointed by him on the advice of the Chief Minister. Ministers hold office during the pleasure of the Governors. The Council of Ministers is collectively responsible to the Legislative Assembly of the State.

Every State has a legislature. Some States have two chambers, while others have only one chamber. Where there are two chambers, one is known as Legislative Council and other as Legislative Assembly and where there is only one House, its is known as Legislative Assembly. Those with two Houses are Bombay, Bihar, Madras, Punjab, Uttar Pradesh and West Bengal. In all the States, the Lower House is called Legislative Assembly and the Upper House is known as Legislative Council.

Legislative Assembly of each State shall be elected by direct election on the basis of adult franchise. The total number of the Assembly shall in no case be more than 500 or less than 60. The actual strength is to be determined on the ratio of one to every 75,000 of the population of the State. Its normal life is five years. Some seats may be reserved for Scheduled Tribes and Scheduled Castes. The Governor may also nominate the representative of Anglo-Indian community.

The total number of members of the Legislative Council of a State is not to exceed one-fourth of the total members in the Legislative Assembly, but in no case less than 40. This is a permanent body; one-third of its members will retire every second year. Half of its members will be elected from local bodies from among the graduates of three years standing and teachers who have worked at least three years. A third of the members will be elected by the Legislative Assembly from among non-members and the rest will be nominated by the Governor from among men of eminence in literature, art. science or social service.

PART B STATES

Rulers of Part B States are known as *Rajpramukhs*. They are appointed in accordance with the agreements made between the States Unions and Government of India. The head of Jammu and Kashmir is the only exception. The executive power of the State is vested in Rajpramukhs. There is a Council of Ministers to aid and advise him. For 10 years or such period as may be fixed by the President, the governments of these States will function under general control of the Government of India.

PART C STATES

These States are administered by the President through a Chief Commissioner or Lt. Governor. The Parliament may create a Council of Advisers or Ministers for these States.

Under the *Government of Part C States Act* passed by the Parliament in 1951, Ajmer, Bhopal, Coorg, Delhi, Himachal Pradesh and Vindya Pradesh have been provided with *Legislative Assemblies and Council of Ministers,* while Tripura, Manipur and Kutch will have *Councils of Advisers.*

DISTRIBUTION OF POWERS

For the purposes of distributing legislative powers between the Centre and the States, three comprehensive lists have been drawn up. These lists are (1) *Union List,* (2) *Concurrent List* (3) *State List.*

The Parliament has "executive power" to make laws in regard to the matters mentioned in the first list *i.e., Union List.* The *Concurrent List* means that matters shared between Union and the States, such as criminal law, civil procedure, preventive detention, marriage and divorce, transfer of property other than agricultural lands, contracts, bankruptcy, etc.

There are 66 items in the *"State List".* Some of them are police, administration of justice, prisons, local government, public health and sanitation, forests, fisheries, etc. The legislature of a State has "execlusive powers" to make laws in matters mentioned in this list.

Jurisdiction over all other matters not mentioned in the Concurrent and State Lists will belong to the Parliament. This means that the Centre will acquire *residuary powers.*

TRADE, COMMERCE AND INTERCOURSE WITHIN INDIA

There will be freedom of trade, commerce and intercourse throughout the territory of India but Parliament may impose certain restrictions on the freedom of trade, commerce and intercourse between the State and another in the public interest.

FINANCE, PROPERTY, CONTRACT AND SUITS

No tax can be levied or collected except by authority of law. There are provisions for the creation of several funds. The general fund is the *Consolidated Fund of India* into which all income of the Government of India with the specified exceptions should go and a Consolidated Fund for each State. In addition there is a *Public Account of India* and a *Public Account for each State.* The next fund is the *Contingency Fund of India and of each State* at the disposal of the President and India and Governor or Rajpramukh of a State.

ELECTIONS

The superintendence, direction and control of elections to Parliament and Legislature of every State and of President and Vice-President including appointment of election tribunals shall be vested in a Commission known as *Election Commission.*

There shall be only one general electoral role for every territorial constituency and no person will be ineligible for inclusion in such role on grounds only of religion, race, caste, sex or any of them.

There is no property qualifications of the voters. Every person who is a citizen of India and who is not less than twenty one years of age and who is not otherwise disqualified is entitled to vote at the elections of the House of the People and the Legislative Assemblies of States.

SPECIAL PROVISIONS FOR CERTAIN CLASSES

Seats shall be reserved in the House of the People for (*a*) Scheduled Castes, (*b*) Scheduled Tribes.

If Anglo-Indian community is not adequately represented in the House of People, President may nominate not more than two members of that community.

Seats shall be reserved for scheduled castes and scheduled tribes in the Legislative Assemblies of the States. Anglo-Indians are to be nominated by the Governor or Rajpramukh of a State, if not adequately represented.

The reservation of seats and special representation shall cease after ten years from the commencement of this Constitution.

LANGUAGES

Hindi in devnagri script shall be the official language of the Union and the form of numerals for official use shall be the international form of Indian numberals. The English language shall continue for all official purposes of the Union for a period of 15 years, but the President may authorise, during the said period, the use of Hindi in addition to English language. If at the end of 15 years, it is found that Hindi will not be able to replace English wholly, Parliament may provide for the use of English for such purposes as may be specified by law.

The Constitution recognises the use of Assamese, Bengali, Gujerati, Hindi, Karnataka, Kashmir, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, Telegu and Urdu, any one or more of which may be used as the regional languages of the Union.

Amendment of the Constitution—The Constitution shall stand amended when the President gives assent to any bill for the purpose after it is passed in each House of Parliament by a majority of not less than two thirds of the members of the House present and voting. Exception is however made in the case of amendments of certain particular provisions, in which cases any amendment will in addition require the ratification by not less than one-half of the States in Part A and Part B of the First Schedule before such bill is presented to the President for assent.

OUR FLAGS, EMBLEMS, ETC.

HISTORY OF THE FLAG

The *first flag* in India was hoisted on August 7, 1906 in the Parsee Bagan Square, Calcutta. The flag was composed of horizontal stripes of red, yellow and green.

The *second flag* was hoisted by Madam Cama and her band of existed revolutionaries in Paris in 1907. It was similar to the first flag with slight modifications.

The *third flag* was hoisted during Home Rule Movement in 1917 by Dr. Annie Besant and Tilak. This flag had five red and four green horizontal stripes and in the left hand top corner (the pole end) was the Union Jack occupying one-fourth of the space and seven stars in the centre. There was also a crescent and a star in one corner.

The *Tricolour* was first born at A.I.C.C. meeting at Bezwada in 1921 when a flag was shown by an Andhra Youth and improved by Mahatma Gandhi with the addition of a white stripe and charkha. Though not officially accepted by the Congress, it was hoisted on all Congress occasions. In 1931, when A.I.C.C. met at Karachi, a resolution was passed tressing the need for a national flag. In the same year a resolution was passed adopting a tricolour flag as our National Emblem. It had three colours: saffron for courage and sacrifice, white for truth and peace, green for faith and chivalry. It also carried a charka in blue on white band. The size was three breadth by two breadths. On July 22, 1947 with the attainment of independence. the Constituent Assembly adopted it as free India's National flag. The colours and their significance remain the same. The *Dharma Chakra* of Emperor Asoka was adopted instead of Charkha.

THE FLAG OF INDIA

The Flag of India has three bands arranged horizontally. The colours are in the following order. Saffron on the top, white in the middle and dark green at the bottom. The emblem of the flag is the exact reproduction of the wheel on the capital of the Asoka pillar at Sarnath, superimposed in the middle of the central band, and is as broad as the white strip. It has twenty-four spokes. The colour of the emblem is dark blue. The wheel is to be painted, printed, superimposed or embroidered on both sides of the Flag. Also the superimposed cloth must be of the same material as that of the body.

STANDARD NATIONAL FLAG

The National Flag was first presented to the Constituent Assembly of India by Mr. Nehru on July 22, 1947, when a resolution describing the flag was adopted. According to the resolution, the ratio of the width to the length of the flag was to be 2:3. The resolution, however did not furnish details regarding the quality of the cloth and other particulars required for the manufacture of flags. Hence the necessary arose for the preparation of self-contained specifications for the National Flag.

The cloth used for the standard flag is hand-spun and hand-woven khadi. The standard prepared by the Indian Standards Institution prescribes the dimensions of the various parts of the flag. The four standard lengths of the flag are 36, 72. 144 and 252 inches and the widths corresponding to them are 24. 48, 96 and 168 inches respectively. The size of the motor car flag is nine by six inches.

The standard for Asoka Chakra with its twenty-four spokes and its outer and inner diameters, its outer and inner diameters, its central circular portion, the thickness of the spokes at two crucial points, their spacing, etc., have all been specified in a table of dimensions. The Asoka Chakra will be navy blue.

As for the shades of the colours in the flag it has been specified that the three colours in the bunting, namely India saffron (kesari), India green and navy blue should correspond, when visually examined in ordinary daylight, to the colours in the sealed standard flag held in the custody of the Indian Standards Institution. In order to ensure uniformity of shades of colours on a permanently scientific basis, colour values in terms of tri-chromatic co-efficients, corresponding to the colours of the original Constituent Assembly flags, have been prescribed.

Speech of Sri Jawharlal Nehru in the Constituent Assembly on July 22, 1947.

"Now, Sir, may I say a few words about this particular Flag. It will be seen that there is a slight variation from the one many of us have used during these past years. The colours are the same, a deep saffron, a white and a dark green. In the white previously there was *charkha* which symbolised the common man in India, which symbolised the masses of the people, which symbolised their industry and which came to us from the message which Mahatma Gandhi delivered. Now this particular *charkha* symbol has been slightly varied in this flag, not taken away at all. Why has it been varied? Normally speaking, the symbol of one side of the Flag should be exactly the same as on the other side. Otherwise, there is a difficulty which goes against the rules. Now, the *charkha* as it appeared previously on this Flag, had the wheel on one side and the spindle on the other. If you see the other side of the Flag, the spindle comes the other way and the wheel comes this way; if it does not do so, it is not proportionate, because the wheel must be towards the pole, not towards the end of the Flag. There was this practical difficulty. Therefore, after considerable thought we were convinced that this great symbol which enthused the people should continue, but that it should continue in a slightly different form, that the wheel should be there and not the rest of the *charkha, i.e.,* the spindle and the string which created this confusion. The essential part of the *charkha* should be there, that is the wheel. So, the old traditions continue in regard to the *charkha* and the wheel. But what type of wheel should we have? Our minds went back to many wheels which had appeared in many places and which all of us have seen, the one at the top of the capital of the Asoka column and in many other places. That wheel is a symbol of India's ancient culture, it is a symbol of many things that India had stood for through the ages."

STATE EMBLEM

India's coat of Arms now carries the inscription *Satyameva Jayate*—Truth Alone Triumphs. This replaces the Royal motto in French "diew et mondroit"—God and my Kight—used by the British Administration in India. The new inscription of India's coat of Arms will be in *Devnagri* (Sanskrit).

NATIONAL SONGS

The Constituent Assembly of India on the 24th January 1950 adopted Rabindranath Tagore's song *Jana-gana-mana* as the national anthem of India and another popular song, Bankim Chandra Chatterjee's *Bande Mataram* was given equal status with it.

BANKS IN INDIA

Classes of Banks in India—The banks in India are generally classified under the following heads—(1) Reserve Bank of India (2) Indian Banks comprising (*a*) the Imperial Bank of India and other Indian scheduled banks (*b*) Indian non-scheduled banks or Indian joint stock banks other than those included in the Second Schedule of the Reserve Bank of India Act and (*c*) Indian Cooperative banks registered under the laws of the States where they are situated and (3) Foreign banks comprising scheduled and non-scheduled banks whose registered offices are located outside the Indian Union. Other two classes of Banks are *Indigenous banks* and *Land Mortgage Banks.*

(1) RESERVE BANK OF INDIA

Reserve Bank was established in India from the 1st of April, 1935 under the Reserve Bank of India Act, 1934 as shareholders' bank but was nationalised from 1st January 1949 by the Reserve Bank of India Amendment Act of 1948.

Nationalisation of the Bank—On September 3, 1948 Indian Parliament passed legislation nationalising the Reserve Bank of India. From 1st January 1949, after 14 years the Reserve Bank of India officially began its career as a nationalized institution.

The main provisions of the *Reserve Bank of India (Transfer of Public ownership) Act of 1948* are:—

(1) All shares in the capital of the Bank are deemed to be transferred to the Central Government on 1st January, 1949.

(2) Compensation to be paid to the shareholders at the rate of Rs. 118-0-0 per share of Rs. 100 paid-up, partly in the form of promissory notes being interest at 3 per cent per annum and repayable at par and partly in cash.

(3) The Central Government is empowered to give, from time to time, such directions to the Bank, as it may, after consultation with the Governor of the Bank, consider necessary in the public interest.

Management of the Bank—The general superintendence and direction are entrusted to a Central Board consisting of a Governor and two Deputy Governors appointed by the Central Government and ten directors and one government official, all nominated by the Central Government. The Directors are now to hold office for a period of four years. A Local Board has been constituted for each of the four areas consisting of five nominated members to represent territorial and economic interests.

Scheduled Banks—Under the Reserve Bank Act of India, the banks in India have been classified into Scheduled and non-scheduled Banks. Banks which carry on the business of banking in any state to which the Reserve Bank of India Act extends and which (*a*) have paid up capital and reserves of an aggregate, real or exchangeable, value of not less than Rs. 5 lakhs and (*b*) are companies as defined in Section 2(2) of the Indian Companies Act 1913 or corporations or companies incorporated by or under any law in force in any place outside India, are eligible for inclusion in the Second Schedule to the Reserve Bank of India Act 1934 and when so included are known as scheduled banks; the rest have been treated as non-scheduled banks. The scheduled banks have certain obligations to fulfil like maintenance of requisite cash reserves with the Reserve Bank of India and submission of periodical returns to the Reserve Bank of India. In return for this, the Scheduled banks can expect financial accommodation from the Reserve Bank by availing of the rediscounting facilities offered by the Reserve Bank.

Non-Scheduled Banks—The non-scheduled banks have been divided into four classes; A 2 Banks or banks which have paid-up capital and reserves of Rs. 5 lakhs and above each, but which have not been included in the Second Schedule to the Reserve Bank of India Act; B Banks or banks each having paid up capital and reserves between Rs. 1 lakh and Rs. 5 lakhs; C banks or banks each having paid-up capital and reserves between

Rs. 50,000 and Rs. 1 lakh; and D Banks or banks each having paid-up capital and reserves of less than Rs. 50,000. A 2 banks include several banks registered and working in the former Indian States which had not acceded to the Indian Union in respect of banking and had no branches in the Indian Union and were therefore, not eligible for inclusion in the second schedule.

Reserve Bank & the Banking Companies Act—The Banking Companies Act of 1949 centralises all supervision as well as control over the banks in the hands of the Reserve Bank of India. The main duties imposed upon the Reserve Bank in this respect may be classified as follows: (*a*) Supervision and inspection of banks, (*b*) the licensing of banks and control over opening of branches, (*c*) the examination and sanction of schemes of arrangement and amalgamations, (*d*) the liquidation of banking companies, (*e*) the receipt and scrutiny of prescribed returns and (*f*) advising banks generally and helping them in times of emergencies.

RESERVE BANK OF INDIA

ISSUE DEPARTMENT—*Lakhs of Rupees*

(Average of Friday Figures)

	LIABILITIES			ASSETS				
	Notes in Circulation 1	*Notes held by Banking Department* 2	*Total Liabilities* 3	*Gold Coin & Bullion* 4	*Foreign Securities* 5	*Rupee Coin* 6	*Rupee Securities* 7	*4 & 5 as p.c. of (3)* 8
1945-46 ..	1,162,64	16,41	1,179,05	44,42	1,061,26	15,53	57,84	93·78
1946-47 ..	1,222,96	32,61	1,255,57	44,42	1,133,88	19,43	57,84	93·85
1947-48 ..	1,227,82	47,12	1,274,95	44,42	1,135,32	32,36	62,84	92·53
1948-49 ..	1,231,84	22,02	1,253,86	44,49	907,47	42,96	265,62	75·43
1949-50 ..	1,128,94	24,00	1,152,94	40,02	647,04	50,53	415,36	59·59
1950-51 ..	1,163,21	17,19	1,180,40	40,02	624,70	57,21	458,47	56·31

BANKING DEPARTMENT—*Lakhs of Rupees*

(Average of Friday Figures)

	LIABILITIES			ASSETS			
	Total Deposits	*Other liabilities*	*Total liabilities or assets*	*Notes & Coin*	*Balances held abroad*	*Loans & Advances to Govts.*	*Other Loans & Advances*
1945-46 ..	514,39	16,32	540,71	16,72	488,23	22	12
1946-47 ..	590,44	18,32	618,76	32,85	528,83	5	82
1947-48 ..	520,40	14,55	544,96	47,24	406,95	1,57	21
1948-49 ..	393,72	15,33	419,05	22,12	307,78	1,71	3,34
1949-50 ..	295.69	15,76	321,45	24,12	180,91	3,35	8,39
1950-51 ..	290,82	18,14	318,97	17,31	207,70	2,37	6,77

BANKING DEPARTMENT—*Lakhs of Rupees*

(Average of Friday Figures)

	Bills purchased & Discount	*Invest-ments*	*Other assets*
1945-46	3,35	24,65	7,42
1946-47	2,33	31,70	22,18
1947-48	2,62	81,53	4,85
1948-49	4,28	75,65	4,14
1949-50	4,30	96,04	4,34
1950-51	3,05	76,72	5,06

(*Source: Report of Finance & Currency*) *1950-51*

LIABILITIES AND ASSETS OF THE RESERVE BANK OF INDIA

(ISSUE AND BANKING DEPARTMENT COMBINED—*Lakhs of Rupees*)

LIABILITIES	*Capital & Reserves*	*Notes in circulation*	*Total Deposits*	*Other liabilities*	*Total liabilities or Assets*
1945-46	.. 10,00	1,218,77	643.37	39.52	1,911,66
1946-47	.. 10,00	1,242.03	562.01	34,74	1,848,79
1947-48	.. 10,00	1,304.36	457,32	34.51	1,806,19
1948-49	.. 10,00	1,169.35	332,29	42.62	1,554,25
1949-50	.. 10,00	1,163,52	291.44	38.02	1,502,98
1950-51	.. 10,00	1,247,41	320.03	34,82	1,612,27

ASSETS	*Gold Coin & bullion*	*Foreign Assets*	*Rupee Coin*	*Notes*	*Rupee Securities*	*Loan & Advances to Govts.*	*Other Loans*	*Bills purchased and discontinued*	*Other Assets*
1945-46 ..	44,42	1,724,30	16,02	19,64	88,47	..	18	2,60	16,04
1946-47 ..	44,42	1,612.54	20,64	16.05	124.16	..	55	3.25	27,18
1947-48 ..	44,42	1,527,97	37,05	15,13	175,65	3	..	1,81	4,14
1949-50 ..	40 02	944,14	42,14	21,76	493,42	..	6,36	2,13	4,29
1949-50 ..	40.02	858.78	51,23	18.21	515.94	24	11,21	1,97	5.38
1950-51 ..	40,20	884,18	54,51	11,72	585,83	1,56	16,75	8,21	9,50

(2) IMPERIAL BANK OF INDIA

Imperial Bank of India was established in 1921 after amalgamation of three Presidency Banks of Bengal. Bombay and Madras originated in the days of East India Co. Under Imperial Bank Act of 1920. the capital of the Bank consists of 750,000 shares of Rs. 500 each fully paid up transferred over from the three Presidency Banks and an additional 1,500,000 shares of Rs. 500 each on which Rs. 125 per share has been paid up. making in all the present authorised capital of Rs. 11,25,00,000 of which Rs. 5.62,50,000 has been paid up.

The Bank has been authorised under the Act to have three local Head Offices at Bombay, Calcutta and Madras where three separate register of its shareholders are kept.

The general superintendence of the affairs of the Bank is entrusted to a Central Board of Directors. Besides Central Board, there are three Local Boards at Bombay, Calcutta and Madras.

Bank has entered into an agreement with the Reserve Bank of India under the terms of which it will act as the sole agent of the Reserve Bank at every place in India where there is a branch of the Imperial Bank and where there is no branch of the Reserve Bank.

The position of the Imperial Bank is as follows:—

LIABILITIES AND ASSETS OF THE IMPERIAL BANK OF INDIA

(In Lakhs of Rupees)

	Paid-up Capital	*Reserves*	*Deposits*	*Cash balances*	*Investments*	*Loans & Advances*
1940	5,63	5,62	96,03	24,83	48,57	32,31
1941	5,63	6,52	108,92	15,27	64,39	38,88
1942	5,63	5,75	163,46	23,00	116,41	33,79
1943	5,63	5,85	214.53	53,36	130.20	40,60
1944	5,63	6,00	237,78	28,31	148,63	70,23
1945	5,63	6,05	237,41	41.60	154.18	72.97
1946	5,63	6,17	271,67	42,45	154,53	94,27
1947	5,63	6,25	286.59	42.89	164.19	89,15
1948	5,63	6,27	280,29	43,67	161,25	98.00
1949	5,63	6,30	250.46	66.89	106,84	91.81
1950	5,63	6,32	231,37	28,18	121,56	101,96

(3) EXCHANGE BANKS

The main business of the Exchange Banks is financing the foreign trade of India. They purchase bills in foreign currency, make loans against the shipping bills and other documents and finance imports of gold and silver. They also play some little part in the financing of inland trade mainly the movement of goods for export or of goods imported.

The Exchange Banks furnish the immediate link with the outside world of trade and commerce. Primarily the exchange bank specialise in the finance of foreign trade and their beginning dates back to the Oriental Banking Corporation in 1842.

The Exchange Banks are—National Bank of India, Lloyds Bank, Chartered Bank of India, Australia and China, Grindlays Bank, Hongkong and Shanghai Banking Corporation, Mercantile Bank of India, Eastern Bank, National City Bank of New York, Netherlands Indian Commercial Bank, Netherlands Trading Society, American Express Co, Banco National Ultra Marino, Compitor National D'Escompte de Paris, Bank of China, Bank of Communications.

LIABILITIES AND ASSETS OF EXCHANGE BANKS

	No. of Banks	*Deposits*	*Cash in hand*	*Cash at banks*	*Bills discounted & purchased*	*Loans & Advances*	*Investments*
1946	15	169,49	4.70	16.86	6.94	62.05	..
1947	15	163.67	5.16	22,03	9.92	81.51	..
1948	15	160.19	4,53	12,20	10.09	103.92	..
1949	15	162.03	2,18	16,69	16.32	104.79	47.38
1950	15	172,00	3,17	15,58	22,82	111,83	47,36

LIABILITIES AND ASSETS OF OTHER FOREIGN BANKS

	No. of Banks	Deposits	Cash in hand	Cash at banks	Bills discounted & purchased	Loans & Advances	Investments
1946 ..	13	12,08	90	1,41	65	2,03	..
1947 ..	8	10,50	67	3,40	76	5,58	..
1948 ..	5	7,18	30	83	29	1,37	..
1949 ..	6	4,82	16	48	17	89	2,95
1950 ..	6	4,08	14	38	9	98	2,19

(4) JOINT STOCK BANKS

All the Indian Joint Stock Banks are registered under the Indian Companies Act.

The Joint Stock Banks are sub-divided into four classes, namely (*a*) those with a paid-up Capital and Reserve of Rs. 5 lakhs and over (*b*) those with paid-up Capital and Reserves between one lakh and less than Rs. 5 lakhs and two other divisions with less Capital and Reserves.

Joint Stock Banks are mainly commercial Banks. Indian Joint Stock Banks provide India's internal banking facilities. They receive deposits or mortgages, discount local bills, open cash credit accounts, advance loans against stock exchange securities, grain or cloth, buy and sell shares and transact other banking business. The agricultural business of these banks is small and is generally confined to big landholders and planters.

LIABILITIES AND ASSETS OF INDIAN JOINT STOCK BANKS

(In lakhs of Rupees)

IMPERIAL BANK OF INDIA

	Paidup Capital	Reserves	Total deposits	Total liabilities or assets	Cash	Bills discounted & Purchased	Loans & Advances	Investments	Net Profit
1946 ..	5,63	6,17	271,67	294,39	42,46	11,02	83,26	154,53	1,14
1947 ..	5,63	6,25	286,59	299,40	42,89	12,08	77,07	164,20	1,23
1948 ..	5,63	6,28	280,29	306,15	43,68	12,26	85,74	161,25	1,20
1949 ..	5,63	6,30	250,46	268,64	46,96	5,69	86,12	106,85	1,23
1950 ..	5,63	6,33	231,37	254,99	28,52	7,51	94,44	121,55	1,25
OTHER INDIAN SCHEDULED BANKS									
1946 ..	28,93	14,44	611,21	756,33	116,44	31,05	275,02	270,19	6,16
1947 ..	30,76	15,81	619,87	744,95	121,48	27,12	261,29	284,84	5,96
1948 ..	31,30	19,48	594,91	730,21	115,33	26,40	251,10	279,64	4,87
1949 ..	31,06	20,05	509,10	635,83	92,49	24,79	226,09	241,86	4,32
1950 ..	30,38	20,04	522,99	673,23	91,19	34,52	233,16	239,96	4,11
NON-SCHEDULED BANKS CLASS A2									
1946 ..	5,13	1,54	62,72	75,83	18,27	1,56	28,73	23,24	64
1947 ..	5,22	1,79	49,07	62,10	10,50	1,93	27,90	17,57	44
1948 ..	5,18	2,32	46,08	57,92	7,97	1,47	27,61	16,71	25
1949 ..	5,73	2,62	45,99	59,41	7,62	1,41	30,29	15,53	28
1950 ..	6,38	2,63	46,69	60,57	6,22	1,11	26,47	21,94	23

NON-SCHEDULED BANKS—CLASS B

1946 ..	3,13	80	33,33	41,87	7,45	1,44	20,65	9,62	34
1947 ..	2,99	88	27,52	35,09	5,44	1,22	18,65	7,66	36
1948 ..	3,13	94	24,10	31,65	4,37	1,11	17,46	6,60	26
1949 ..	3,06	99	20,56	27,64	3,41	76	15,74	5,87	26
1950 ..	3,06	1,10	21,86	29,04	3,90	75	16,21	6,14	29

NON-SCHEDULED BANKS—CLASS C

1946 ..	72	17	5,19	6,68	110	18	4,01	89	4
1947 ..	68	17	5,05	5,50	77	10	3,43	79	6
1948 ..	67	18	3,50	4,48	61	9	3,24	50	5
1949 ..	72	18	3,41	4,75	61	10	3,13	54	6
1950 ..	74	18	3,80	5,21	83	14	3,20	60	5

NON-SCHEDULED BANKS—CLASS D

1946 ..	25	8	2,79	3,71	62	2	2,12	43	1
1947 ..	26	10	2,69	3,50	56	2	2,12	29	2
1948	25	9	1,07	2,70	32	2	1,61	27	2
1949 ..	21	8	1,59	2,00	20	..	1,37	16	2
1950 ..	22	7	1,31	1,80	24	2	1,14	14	2

TOTAL NON-SCHEDULED BANKS

1946 ..	8,23	2,59	104,03	128,09	27,44	3,20	55,51	34,18	1,03
1947 ..	9,15	2,94	83,32	106,19	17,09	3,27	52,10	26,31	88
1948 ..	9,23	3,53	75,65	97,13	13,27	2,69	49,92	24,08	58
1949 ..	9,72	3,87	71,55	93,80	14,84	2,27	50,53	22,10	62
1950 ..	10,14	3,98	73,65	96,63	11,22	2,02	47,02	28,82	60

ALL INDIAN JOINT STOCK BANKS

1946 ..	42,79	23,20	986,91	1178,81	186,33	45,26	413,79	458,90	833
1947 ..	45,54	25,00	989,78	1150,54	181,63	42,47	390,46	475,35	807
1948 ..	46,16	29,29	950,85	1133,49	172,29	41,35	386,76	464,97	655
1949 ..	46,41	30,22	831,11	998,27	171,22	32,75	362,74	370,81	617
1950 ..	46,41	30,25	828,01	1024,84	130,59	44,05	374,62	390,33	596

(5) CO-OPERATIVE BANKS

The Co-operative Banking organization owes its origin to the Co-operative Credit Societies Act of 1904. This Act was further amended by the Act of 1912. Under co-operative Societies Act, all classes of registered societies whether in themselves primary units or federation of constituent societies are spoken as 'Societies'. In actual practice, however, the primary units are in some provinces known as banks and in others as societies.

The Co-operative banking system consists of the Provincial Bank at apex, the affiliated Central Banks, and lastly the primary societies affiliated to the Central Banks. According to the rules framed under the Act, these banks can not generally lend to non-members.

The functions of Co-operative Banks are as follows:—

(1) Attracting deposits from money-lenders and professional classes. (2) Lending money to the primary co-operative societies. (3) Taking away the excess fund of a Co-operative Society and utilising it for making up the deficiency of others. (4) Supervising and guiding the actions of affiliated Societies.

CLASS 'A'—(*Capital and Reserve of Rs. 5 lakhs and above*)
(*In '000 of Rs.*)

	No. of Banks	*Paid-up Capital*	*Reserve & Other Funds*	*Deposits & Loans held*	*Total Liabilities & Assets*
1945-46 ..	46	2,54,07	3,66,50	38,49,31	48,29,44
1946-47 ..	51	3,04,75	3,83,98	45,58,68	55,62,54
1947-48 ..	56	3,31,37	4,21,55	49,49,57	60,64,06
1948-49 ..	63	4,01,34	4,63,52	62,21,66	75,64,40
1949-50 ..	72	4,77,00	5,22,16	64,35,17	77,31,13

	Loans outstanding	*Cash in hand & Banks*	*Investments*	*Premises immoveable properties*	*Net Profit*
1945-46	.. 19,81,38	3,50,76	18,17,72	37,86	..
1946-47	.. 26,74,85	3,95,67	19,68,95	30,96	..
1947-48	.. 28,00,19	5,36,27	21,51,42	34,74	44,99
1948-49	.. 42,21,08	5,37,16	18,75,90	34,40	58,50
1949-50	.. 42,20,71	7,63,48	20,74,70	60,05	56,06

CLASS 'B'—(*One lakh and 5 lakhs*)

	No. of Banks	*Paid up Capital*	*Capital & Reserves*	*Deposits & Loans held*	*Total Liabilities & Assets*	*Net Profit*
1945-46	.. 239	2,34,48	2,70,64	19,30,61	25,06,33	..
1946-47	.. 258	2,50,23	2,75,93	21,25,48	28,96,59	..
1947-48	.. 267	2,72,96	2,80,72	22,53,82	30,12,99	30,27
1948-49	.. 296	3,05,38	3,05,06	25,33,16	33,73,34	31,82
1949-50	.. 397	3,28,30	3,26,59	25,66,16	31,89,40	35,82

	Loans outstanding	*Cash in hand & Banks*	*Investments*	*Premises & immoveable properties*
1945-46	.. 11,00,67	3,07,63	7,98,50	37,44
1946-47	.. 13,69,28	2,72,38	04,23	44,02
1947-48	.. 15,43,48	3,20,23	63,39	43,71
1948-49	.. 18,80,25	3,21,84	7,90,09	46,75
1949-50	.. 19,01,90	4,25,89	7,11,31	66,68

(Source: *Statistical Tables relating Banks in India, 1950*).

(6) INDIGENOUS BANKS

The indigenous bankers consist mainly of *Shroffs* small money-lenders the loan offices in Bengal and a few other provinces and lastly the *Nidhis* and *Chit* funds in Madras.

The indigenous banks are not required to register themselves under any law and as such there is no legal definition of the term available. The special feature that distinguishes indigenous banks from mere money-lenders is that they receive deposits and deal in *hundis* in addition to making loans. Agriculturists, traders, merchants and small industrialists have to depend largely on indigenous bankers and money-lenders in places where joint stock banks do not exist. The indigenous bankers are found to render valuable services in connection with financing of internal trade and middle-sized and small industries and inland remittance works.

(7) LAND MORTGAGE BANKS

Royal Commission on Agriculture in India in 1928 and Banking Enquiry Committee in 1930 recommended that Land Mortgage Banks based on Co-operative principles are desirable in many parts of India. The principal objects of these banks should be the redemption of the land and houses of the agriculturists and liquidation of old debts. Other objects are improvements of land and of methods of cultivation and the building of houses of agriculturists and purchase of land in special cases.

Land Mortgages Banks have been started under the auspices of the Co-operative movement in the Punjab, Madras, Bombay, Bengal and Assam, but the beginning is very small.

BANKING COMPANIES ACT

The Act was passed on Feb. 17, 1949 and applies to all banking companies except co-operative banks. Banking has been defined as "the accepting, for the purpose of lending or investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawable by cheque, draft, order or otherwise.

Prior of March 1949, any company which used as part of its name the word 'bank', 'banker' or 'banking' was deemed to be, according to the Indian Companies Act 1913, as amended in 1942, a banking company, irrespective of whether or not banking was its principal business. Under the Banking Companies Act 1949, the business which a banking company may transact has been defined and minimum paid up capital and reserves varying with the geographical coverage of a banking company, have been prescribed. The minimum paid-up capital and reserves required of a banking company having only one office outside the city of Bombay or Calcutta, has been fixed at Rs. 50,000. A banking company is required to use as part of its name the word 'bank', 'banker' or 'banking' and a non-banking company is prohibited from using any of these words in its name.

All banks are to be licensed. The licence is to be issued by the Reserve Bank which may require to be satisfied that the applicant bank is in a sound financial position, and further in respect of a foreign bank, that the law of the country in which it is incorporated does not discriminate in any way against banking companies registered in India.

Scheduled Banks continue to be required to keep minimum reserves with the Reserve Bank of India and to submit weekly returns under Reserve Bank of India Act, 1934. All banks other than scheduled banks are now required to maintain in cash with them or with the Reserve Bank, 2 p.c. and 5 p.c. of their time and demand liabilities respectively and to submit monthly returns giving details of cash held and time and demand liabilities as on each Friday of the month.

All banking companies are required, two years after commencement of this Act, to maintain at least 20 p.c. of their demand and time liabilities in India in cash, gold or unencumbered approved securities, valued at a price not exceeding the current market price. They have also to maintain in the provinces and acceding States at the end of each quarter.

The Act prohibits inter-locking directorates among banking companies and the employment of managing agents, as well as granting of unsecured loans or advances to any of the directors or to firm in which directors are interested. Monthly returns are to be submitted to the Reserve Bank relating to unsecured loans to companies in which the directors are interested.

Reserve Bank has now the power, on a permanent statutary basis to control the entire joint stock banking system in the Indian Union. It may give direction to banking companies in regard to their lending policies; It may caution or prohibit banking companies generally or any banking company in particular against entering into any particular transaction or class of transaction. It may call for periodical as well as *ad hoc* returns, and in the public interest may also publish such information in any consolidated form it deems fit. It may inspect any bank either on its own initiative or on being directed to do so by the government. Reserve Bank's prior permission is required for opening of new branch offices and the transfer of existing ones. This Act of 1949 was further amended by the *Banking Companies* (*Amendment*) *Act, 1950* which was passed on the 10th March, 1950. The main features of the Act are as follows—(1) It empowers the Reserve Bank to control the opening of branches by Banks in India as well as outside India, (2) scope of the term "Assets in India" is enlarged to include export bills drawn in and import bills drawn on, and payable in India in currencies approved by the Reserve Bank of India as well as securities so approved. (3) The Act contains provisions to facilitate amalgamation of banking companies. (4) The Act provides for automatic transfer of all assets and liabilities of the amalgated banking companies to the transferee company. A compromise or arrangement between a banking company and its creditors is effective only if certified by the Reserve Bank.

By *Reserve Bank of India* (*Amendment*) *Act* of 1951, the power of the Reserve Bank was further widened, such as Bank may exempt any bank from the provision of maintaining statutory balances with it or submitting returns under s. 42 for such period and to such extent as it may think fit; Bank's power to obtain returns similar to those from scheduled banks is extended to all State co-operative banks; the right of the Imperial Bank to be the sole agent of the Reserve Bank is limited to Part A & C States; Bank is authorised to act as an agent for any foreign government or person approved by the government; Bank is authorised to undertake the monetary and debt management functions of Part B States by agreement with such States.

Another Act known as *Banking and Insurance Companies Tribunal Act* was passed in Dec. 1949. It prohibits State Governments from referring disputes between the employees and banking or insurance companies, having branches in more than one State, to any officer or authority subordinate to themselves, for adjudication, inquiry or settlement. Such disputes fall under the jurisdiction of the Industrial Tribunal established for the purpose by the Central Government.

Industrial Finance Corporation—The Industrial Finance Corporation came into being under the Industrial Finance Corporation Act passed on March 27, 1948 which came into force on July 1, 1948. The authorised capital of the Corporation is Rs. 10 crores divided into 20,000 fully paid-up shares of Rs. 5,000 each, of which 10,000 shares have been issued. The Central Government and the Reserve Bank of India have taken up shares worth Rs. one crore each and balance of Rs. 3 crores has been offered to the Scheduled banks, Insurance Companies, Investment Trusts, Co-operative

Banks. Under the Act the shares are guaranteed both as to the principal and payment of the annual dividend at such rates as may be fixed by the Central government. The Central government have fixed the guaranted dividend at 2¼ per cent per annum. The Corporation is authorised (1) to guarantee loans raised by industrial concerns which are repayable within a period not exceeding 25 years and are floated in the open market. (2) Under writing the issue of stocks, shares, bonds or debentures by industrial concerns and (3) granting advances to or subscribing to debentures of industrial concerns, repayable within a period not exceeding 25 years.

Rural Banking Enquiry Committees' Report—The important recommendations of the Committee are—(1) Reserve Bank should establish offices in capitals of major States and increase the currency chests of its Issue Department. (2) Imperial Bank should extend its branches to the *taluka* or *tehsil* towns where these do not exist at present. (3) Commercial banks and Co-operative Banks should be encouraged to open branches in *talukas*, towns and smaller towns. (4) Services of postal savings banks should be improved and more fully utilised. (5) The co-operative institutions should be strengthened and given special assistance. (6) Exchange and remittance facilities should be made available on a larger scale and over a wider area than at present. (7) Warehousing Development Board should be established for developing warehousing through loans and subsidies to banks and co-operative institutions. (8) Reserve Bank should be appointed as banker to all Part B States.

BANKING STATISTICS

NON-SCHEDULED BANKS

	1945	*1948*	*1949*	*1950*
A2	819	567	516	488
B	1,084	693	658	663
C	475	211	224	241
D	..	236	185	176
Foreign Banks	..	4	6	6
Total	2,378	1,711	1,589	1,574
Co-operative Banks ..	569	597	646	724

BRANCH BANKING

	Imp. Bank	*Other Ind. Scheduled Banks*	*Foreign Banks*	*Total*
1938 (Undivided India) ..	358	677	93	1,128
1945 " ..	426	2,454	77	2,957
1948 (Indian Union) ..	367	2,522	74	2,963
1949 " ..	377	2,399	76	2,852
1950 " ..	382	2,331	66	2,779

TOTAL AMOUNT & NUMBER OF CHEQUES CLEARED

	No. of cheques	*Amount (Lakhs of Rs.)*		*No. of cheques*	*Amount (Lakhs of Rs.)*
1942	.. 1,54,38,289	2,713,46	1947	.. 2,46,39,884	6,459,19
1943	.. 1,65,40,120	4,228,92	1948	.. 2,34,12,911	6,671,05
1944	.. 1,92,37,201	5,401,90	1949	.. 2,45,61,316	6,325,36
1945	.. 2,19,75,402	6,272,60	1950	.. 2,55,40,285	6,278,16
1946	.. 2,36,99,467	7,262,19			

POST OFFICE SAVINGS BANKS

	No. of depositors (000)	*Deposits including interest (in lakhs of Rs.)*	*Withdrawals (in lakhs of Rs.)*	*Balance (in lakhs of Rs.)*	*Average balance per depositor (Rs.)*
1944	.. 2,774	39,79	27,83	64,18	231—4
1945	.. 3,095	49,13	33,09	80,22	259—2
1946	.. 3,507	82,64	47,81	115,05	328—1
1947	.. 3,973	104,33	77,03	142,35	358—4
1948	.. 3,153	99,67	80,83	128,11	406—3
1949	.. 3,426	98,15	77,77	148,49	433—3
1950	.. 3,808	101,66	82,96	167,19	439—1

LOANS & ADVANCES & BILLS DISCOUNTED AND PURCHASED

(In Lakhs of Rupees)

	Indian Scheduled Banks			**Foreign Banks**	
	Loans & Advances	*% of Deposits*		*Loans & Advances*	*% of Deposits*
1938	.. 85,99	49·62	1938	.. 33,84	48·29
1945	.. 294,52	36·72	1945	.. 54,82	25·59
1948	.. 339,31	44·14	1948	.. 115,61	69·24
1949	.. 319,43	46·54	1949	.. 122,11	73·33
1950	.. 326,00	46·68	1950	.. 135,65	77·17
	Non-Scheduled Banks			**Co-operative Banks**	
	Loans & Advances	*% of Deposits*		*Loans & Advances*	*% of Deposits*
1938	.. 12,16	81·94	1938	.. 29,00	82·31
1945	.. 54,52	51·10	1945	.. 33,69	57·80
1948	.. 51,11	68·55	1948	.. 43,44	60·32
1949	.. 50,32	71·69	1949	.. 61,01	69·69
1950	.. 46,79	64·55	1950	.. 61,23	68·03

TOTAL INVESTMENTS

(In Lakhs of Rupees)

	Indian Scheduled Banks			**Indian Non-Scheduled Banks**	
	Total Investments	*% to Deposits*		*Total Investments*	*% to Deposits*
1938	.. 83,96	48·45	1938	.. 3,41	22·98
1945	.. 433,20	54·10	1945	.. 31,46	29·49
1948	.. 440,89	50·38	1948	.. 24,09	31·85
1949	.. 348,71	45·91	1949	.. 22,10	30·90
1950	.. 361,51	47·92	1950	.. 28,82	39·13

INVESTMENTS OF INDIAN JOINT STOCK BANKS

(In Lakhs of Rupees)

	Indian Scheduled Banks			**Indian Non-Scheduled Banks**	
	Govt. Securities	*Others*		*Govt. Securities*	*Others*
1948	396,19	44,70	1948	18,57	5,51
1949	308,95	39,76	1949	17,59	4,51
1950	316,22	45,29	1950	24,41	4,41

CAPITAL & RESERVES OF INDIAN SCHEDULED BANKS

(In Lakhs of Rupees)

	Imperial Bank			**Other Banks**	
	Capital & Reserve	*% to Deposits*		*Capital & Reserve*	*% to Deposits*
1938	11,18	13·72	1938	10,93	11·91
1945	11,70	4·51	1945	38,77	7·14
1948	11,90	4·25	1948	50,79	8·54
1949	11,93	4·76	1949	51,11	10·04
1950	11,96	5·17	1950	50,42	9·64

	Non-Scheduled Banks			**Co-operative Banks**	
	Capital & Reserve	*% to Deposits*		*Capital & Reserve*	*% to Deposits*
1938	3,74	25·20	1938	10,00	28·38
1945	11,62	10·89	1945	13,56	23·26
1948	12,77	16·88	1948	13,07	18·15
1949	13,59	18·99	1949	14,75	16·85
1950	14,38	19·52	1950	16,54	18·38

DEPOSITS

(In Lakhs of Rupees)

	Scheduled Indian Banks	*Scheduled Foreign Banks*	*Non-Scheduled Banks (Indian & Foreign)*	*Co-operative Banks*
1938	173,29	70,07	14,84	35,23
1945	802,17	179,00	106,69	58,29
1948	768,77	166,96	74,56	72,03
1949	689,39	166,53	70,19	87,55
1950	698,41	175,76	72,49	90,01

CASH

(In Lakhs of Rupees)

	Indian Scheduled Banks			**Foreign Scheduled Banks**	
	Cash	*% to Deposits*		*Cash*	*% to Deposits*
1938	22,44	12·95	1938	5,27	7·52
1945	147,83	18·43	1945	18,32	10·23
1948	129,08	16·79	1948	17,77	10·64
1949	116,55	16·98	1949	19,39	11·64
1950	103,55	14·83	1950	19,15	11·07

Non-Scheduled Banks

	Cash	% to Deposits
1938 ..	1,81	12·20
1945 ..	33,05	30·98
1948 ..	9,87	13·24
1949 ..	11,82	16·84
1950 ..	11,21	15·46

Co-operative Banks

	Cash	% to Deposits
1938 ..	2,13	6·05
1945 ..	6,58	11·29
1948 ..	8,57	11·90
1949 ..	8,59	9·81
1950 ..	11,89	13·21

DISCOUNT RATES OF CENTRAL BANKS OF SELECTED COUNTRIES

	1944	1945	1946	1947	1948	1949	1950
Argentina ..	3·50	3·50	3·40	3·40	3·40	3·40	3·40
Australia ..	4·25	4·25	4·25	4·25	4·25	4·25	4·25
Canada ..	1·50	1·50	1·50	1·50	1·50	1·50	1·50
France ..	1·75	1·63	1·63	2·50 & 3·00	3·00	3·00	2·50
India ..	3·00	3·00	3·00	3·00	3·00	3·00	3·00
Italy ..	4·00	4·00	4·00	5·50	5·50	4·50	4·00
Japan ..	3·29	3·29	4·65	4·65	5·11	5·11	5·11
Mexico ..	4·50	4·50	4·50	4·50	4·50	4·50	4·50
Switzerland ..	1·50	1·50	1·50	1·50	1·50	1·50	1·50
U.K. ..	2·00	2·00	2·00	2·00	2·00	2·00	2·00
U.S.A. ..	1·00	1·00	1·00	1·00	1·50	1·50	1·75

LIABILITIES AND ASSETS OF BANKS IN INDIAN UNION

(In Crores of Rupees)

Scheduled Banks

Year (1)	No. of Banks (2)	Deposits (3)	Cash in hands & at Banks (4)	% of (4) to Deposits (5)	Bills & Advances (6)	% of (6) to Deposits (7)	Offices (8)
1946 ..	94	928·33	151·88	16·36	411·10	44·28	2827
1947 ..	97	969·24	169·49	17·49	430·16	44·38	2987
1948 ..	95	935·75	146·85	15·69	454·92	48·62	2963
1949 ..	94	852·92	135·94	15·94	441·54	51·77	2852
1950 ..	92	874·17	122·70	14·04	461·65	52·81	2779

Non-Scheduled Banks

Year (1)	No. of Banks (2)	Deposits (3)	Cash in hands & at Banks (4)	% of (4) to Deposits (5)	Bills & Advances (6)	% of (6) to Deposits (7)	Offices (8)
1946 ..	554	97·43	25·59	26·27	54·61	56·05	2028
1947 ..	551	82·84	16·96	20·47	54·56	65·86	1832
1948 ..	544	74·56	9·87	13·24	51·11	64·55	1711
1949 ..	526	70·19	11·82	16·84	50·32	71·69	1589
1950 ..	524	72·49	11·21	15·46	46·79	64·55	1574

Co-operative Banks

Year (1)	No. of Banks (2)	Deposits (3)	Cash in hands & at Banks (4)	% of (4) to Deposits (5)	Bills & Advances (6)	% of (6) to Deposits (7)	Offices (8)
1946 ..	285	57·80	6·59	11·38	30·82	53·32	506
1947 ..	309	66·84	6·68	9·99	40·44	60·49	548
1948 ..	323	72·03	8·57	11·90	43·44	60·32	597
1949 ..	359	87·55	8·59	9·81	61·01	69·67	646
1950 ..	389	90·01	11·89	13·21	61·23	68·03	724

All Banks							
1946	933	1083·56	184·06	16·99	496·53	45·82	5361
1947	957	1118·92	193·13	17·26	525·16	46·93	5367
1948	962	1082·32	165·29	15·27	549·47	50·77	5271
1949	979	1010·66	156·35	15·47	552·87	54·70	5087
1950	1005	1036·67	145·80	14·06	569·67	54·95	5077

(*Source:* Statistical Table Relating to Banks in India 1950.)

TRANSPORT & COMMUNICATIONS

1. RAILWAYS

Beginning of Railways in India—In his famous minute of April 1853, strongly advocating the construction of a network of trunk railway lines, Lord Dalhousie, the Governor General of India wrote, "Great tracts are teeming with produce they cannot dispose of, others are scantily bearing what they would carry in abundance, only if it could be conveyed whither it is needed."

The first idea of rail-roads in India was conceived in the Madras Presidency as early as 1831-32 when a proposal to lay flat parallel rails on a side of an improved road between Cauverypattam and Caroor, a distance of 150 miles was mooted, with a view to enable animal-driven vehicles to be drawn thereon. The more regular railway projects, however, date from 1844 when the Board of Directors of the East India Company sanctioned the construction of one line from Calcutta to the north-west and another from Bombay to the east and the north. The first line to be opened was a small section of 22 miles by the G.I.P. Railway between Bombay and Kalyan in April 1853. The E. I. Railway line between Calcutta and Pandooa was the second to follow in August 1854 and Madras had the line upto Arkonam opened in July, 1856.

Terms for Opening Railways—In the early stage (between 1844 and 1868) the construction of railways in India was entrusted to British companies under State Guarantee of a minimum return of 4½ p.c. to 5 p.c. on the capital invested. Government provided the land free of cost but retained the right to purchase the lines after 25 or 50 years on certain terms. By 1869, 4,255 miles were constructed under such terms with a capital outlay of about Rs. 89 crores.

This policy, however, entailed heavy loss to the State, amounting by 1869 to about Rs. 1·7 crores and after an unsuccessful attempt to enlist the co-operation of companies without any guarantee of return, Government adopted the policy of direct ownership, construction and management by the State. Between 1869 and 1879 about 2,175 miles of lines were so constructed.

The policy of direct State construction, however, did not bear fruit as expected, specially because the exigencies of time necessitated the diversion of capital resources of the State to other directions and political and strategic considerations had led to the spending of large sums on unproductive lines. Between 1874 and 1878 the country was visited by acute and widespread famines, and the Famine Commission appointed in 1878 strongly urged the early extension of the railway net-work. Company construction was thereafter revived and even for State-owned lines management by companies was favoured. Pursuant to this new policy the East Indian Railway, which was purchased by the State in 1879, was entrusted to the old company for management under revised terms and a number of new companies were formed with more favourable terms for the State than during the first period.

In dealing with the guaranteed companies, the Government exercised as far as found desirable their rights to terminate the contracts as and when opportunities arose in subsequent years, the method of making use of this right and the manner of continuing management of the railways after State acquisition having differed in different cases. The E.I., S.I., G.I.P., B.B. and C.I., S.M., and B.N. Railways were acquired by the State but allowed to be managed by the original companies after securing more favourable financial conditions for the State, the E.B., O.R. and Sind Punjab and Delhi lines were purchased and transferred to State management. The Bengal Central line was purchased and amalgamated with the E.B. Railway and the Madras and Indian Midland lines were after acquisition allowed to be managed by companies running adjoining lines.

New Era Begins—With the beginning of the 20th century a new era began. Traffic had grown enormously and the railways had ceased to be a burden on public exchequer. In 1901, Mr. Robertson, a Special Commissioner appointed to enquire into the working of the railways, examined the pros and cons of State vs. company construction and management and although no marked superiority in favour of companies was observed, he advocated the discontinuance of dual system running side by side and advised the leasing out of all lines to companies, with or without guarantee. Public opinion in India had, however, ceased to remain inarticulate and strong feelings were entertained against management by English companies, which often acted against the best interests of the people and stood in the way of Indianisation and advancement of Indian trade and industry. The old policy, shaped between 1880 and 1884 was allowed to be continued till 1920-21.

In 1921 a Railway Enquiry Committee under the chairmanship of Sir William Acworth examined critically the question of State vs. company management and advocated State-management.

In 1923 the Indian Legislative Assembly adopted a resolution advocating State management only and it was decided to eliminate the system of management by Board of Directors in London as and when opportunities to terminate the contracts with companies were available. Accordingly the East Indian Railway was taken over under direct State management in January 1925 and the G. I. P. Railway in July next year and since then almost all company-managed lines have been taken over.

Management of the Railways—The management of State lines is arranged by the Ministry of Railways with the help of the Railway Board which until recently was composed of a Chief Commissioner, one Financial Commissioner and three members representing engineering, staff and transportation. Except for general questions of policy, the Ministry usually did not go into the details of administration. The Chief Commissioner was the adviser of Government on all technical questions and the Financial Commissioner had a special position in financial matters and had direct access to the Ministry. From the beginning of 1951, however, certain far-reaching changes in the all-India Railway executive have been introduced.

The post of Chief Commissioner has been abolished from 1-4-51 and the Board reconstituted with three functional members and the Financial Commissioner. The Secretary of the Transport Ministry continues to be an additional member ex-officio. One of the functional members has become the Chairman of the Board and in that capacity also functions as a Secretary to the Ministry. The Financial Commissioner retains his special position and in matters financial also holds the rank of a Secretary to the Ministry. These alterations have been effected with a view to enable the Minister responsible to Parliament to be in more direct contact with the administration of the railways.

In addition to the management of State railways certain general powers of supervision and control are vested in the Government of India by the Indian Railways Act of 1890. These powers are also exercised by the Railway Board either through its normal machinery of Directors of traffic, engineering, statistics etc., or through the inspectorate for different regions.

Break of Gauge—One of the unfortunate features of Indian railway system is the lack of uniformity in the guages, there, being the standard gauge of 5′-6″ for 15,694 miles, the meter gauge of 3′-3|8″ for 14,950 miles and about 3,379 miles of narrow guages of 2′ and 2′-6″. These have been called for as a result of an attempt to open out less remunerative and undeveloped tracts by comparatively less costly railway construction as also to provide more suitable light lines for hill sections and specially difficult regions. Whatever might have been the justification for such variety of guages in the earlier years, this absence of uniformity has been a potent factor in fostering inefficiency of the Indian railway system as also isolation of large areas from direct access to the major ports and industrial areas of Calcutta and Bombay.

Classes of Railways—For statistical purposes Indian railways are divided into three classes:—

Class I consists of Railways with annual gross earnings of Rs. 50 lakhs and over.

Class II consists of Railways with annual gross earnings of less than Rs. 50 lakhs but exceeding Rs. 10 lakhs.

Class III consists of Railways with annual gross earnings of Rs. 10 lakhs and under.

Revised Raliway Convention—A revised railway convention was adopted by the Constituent Assembly in 1949 to replace the convention of 1924. Under the original convention as modified in 1934, the contribution from Railway to General Revenues was an indeterminate amount dependent on the annual railway revenue surplus. This did not assist either forward planning of railways or compilation of civil estimates accurately. Nor did it afford the Railways to build up adequate reserves in years of prosperity to ensure a minimum return to General Revenues in years of depression. The annual contribution to the Depreciation Fund, at 1/60th of the capital-at-charge was based on the original costs of the assets to which current replacement costs bear no relation. The following Railway Convention was adopted—

(1) The present relationship between General and Railway Finance should be altered to give the Government of India the status of sole shareholder in the Railway undertaking and General Finance should be guaranteed, for a period of five years from 1950-51, a fixed dividend at 4 per cent on

the loan capital invested as computed annually. This arrangement should be reviewed towards the close of the five-year period.

(2) The annual contribution to the Depreciation Fund should be a minimum of Rs. 15 crores for the five year period and the full cost of replacement should be charged to this fund.

(3) A Development Fund should be constituted from the surpluses of prosperous years, the existing Betterment Fund being merged with it. The Development Fund will provide for passenger amenities and will finance projects which may be necessary but unremunerative to begin with. The scope of the Revenue Reserve Fund which would replace the Railway Reserve Fund should be limited to ensure payment of the fixed dividend to General Revenues and to finance any deficit in railway budget.

(4) With the integration of the States Railways with the Indian Government Railways, two separate accounts—a loan account and a block account should be maintained. The loan account will represent the share capital of the Railways, while the block account will represent the physical assets of the Railways whether financed from loan capital or revenue.

Principles of Regrouping—The regrouping of Indian railways has begun in 1951. According to the memorandum, the main principles governing the regrouping are:—

1. Every railway administration should serve as far as possible a compact region.

2. It should be large enough to provide a HQ organisation of the highest calibre capable of following and assimilating up-to-date improvements in railway techniques and equipped with adequate workshop facilities and statistical, training and research institutions.

3. Regrouping should cause the minimum dislocation in existing arrangements and should be so phased as to prevent any kind of dislocation or even temporary diminution of the quantity or efficiency of railway service.

4. While the existing proposals do not indicate the nature of the internal administration of each group, *viz.*, whether it should be on a Divisional or District system, it is not proposed to adopt a dogmatic attitude in the matter and the vital necessity of causing minimum dislocation will also govern the decision on this important issue.

Re-Grouping—After acquisition by the State of practically all major railways in India, the question of rationalising the management thereof by a more suitable re-grouping of the different railway systems has grown into prominence. A special committee presided over by Pandit Hriday Nath Kunzru enquired into the working of the Indian railways in 1948 and among various matters examined the question of re-grouping of the railways. Since then the Ministry of Railways has proposed to re-group the railways into six major zones as under:—

Zone	*Name of Railway*	*Route mileage*
1.	Northern Railway	5,259
2.	Western Railway	5,552
3.	Central Railway	5,315
4.	Southern Railway	5,724
5.	Eastern Railway	5,016
6.	Northern Eastern Railway	6,336

The Southern Railway—The first integrated railway system under the six-zone regrouping plan of Indian Railways came into being on 14th April 1951, when the Southern Railway was formed by the amalgamation of the three railway systems now serving South India—Madras and Southern Mahratta, South Indian and Mysore Railways. The areas served by these railways are economically interdependent to an extent that renders the traffic from outside the peninsula relatively less important than volume of traffic exchanged between themselves. The entire zone constitutes an economic unity and favours the integration of different railways.

With a total route mileage of 5,999, of which 1,755 miles are on the broad gauge an 4,244 miles on the metre and narrow gauges, the Southern Railway will serve the whole of the peninsula linking Waltair in the east and Poona in the west with Trivandrum in the extreme south. All the three constituent railways were previously organised on the district pattern and district officers were answerable directly to their respective departmental chiefs at headquarters. At the apex of each railway was a General Manager with the heads of departments, who, in their turn, were assisted by a number of deputies. Control was thus centralised in the headquarters organisation. After amalgamation, the district pattern continues but, having regard to the route mileage of the combined system and the volume of traffic which it handles, intermediate co-ordination is proposed to be provided for by the setting up of three operational regions in the zone.

The broad gauge sections in this zone is combined to form the central region with headquarters in Madras. The contiguous metre gauge sections in the north and the south forms the northern and southern metre gauge regions respectively. The headquarters of the southern metre gauge region are located in Tiruchirapalli while that of the northern metre gauge region for the time being, is located in Mysore.

At the headquarters of each region, there are deputy heads of the three major departments, namely, operating, mechanical engineering, and civil engineering, each of whom is individually responsible to the head of his department at the zonal headquarters. The regional deputies are given adequate financial and other powers to enable them to deal effectively with most of the work arising in the region. The delegation of enhanced powers lead to a more efficient and expeditious disposal of work in the region and also relieve heads of departments of a large volume of work which is now referred to headquarters, thus freeing them for more intensive inspection work and for concentrating on major problems of policy.

Other Zones—The Headquarters of the two zonal railways of Eastern India—Eastern Railway and North-Eastern Railway—will be situated in Calcutta. The Eastern Railway will be composed of the whole of the present Bengal Nagpur Railway and Howrah (minus Sahibganj Loop) Asansol and Dinapore Divisions of the present East Indian Railway. The whole of the present Assam Railway, Oudh and Tirhut Railway and Sealdah Division including the Sahibganj Loop of the East Indian Railway will form the North-Eastern Railway.

The remaining portion of the East Indian Railway beyond Moghulsarai and the whole of the present East Punjab Railway will compose the Northern Railway having its Headquarters in Delhi.

The Central and Western Railways have also been inaugurated according to the regrouping plan with headquarters at Bombay on November 6, 1951. The Central Railway (Madhya Railway) comprises G.I.P., Nizam's

State and Dholpur and Scindia Railways. The Western Railways (Paschim Railway) has been formed by the amalgamation of the B.B.C.I., Saurastra and Jaipur State and Rajasthan Railways and Marwar Junction—Phulad section now forming part of Jodhpur Railway.

SOME RAILWAY ORGANISATIONS

Central Standard Office—A separate self-contained organisation called Central Standard Office, for the conduct of all works connected with the production of standard design and specifications for all materials, plant and rolling stock in use on Indian railways was formed in 1930. Three separate branches of this office deal respectively with mechanical engineering standards, civil engineering standards and specifications, while a separate research branch, constituted at a later date undertakes civil and mechanical engineering research.

Indian Railway Conference Association—This Association was first organised in 1871 mainly for the interchange of rolling stock between broad gauge railways. The present non-official organisation was inaugurated in 1902 when a formal resolution was passed, establishing the permanent Conference, independent of Government, with the name of the "Indian Railway Conference." The Association's main function has been to frame rules for the carriage and interchange of the passenger and goods stock, as well as to regulate the rates and fares and conditions under which the traffic shall be carried.

Clearing Accounts Office—A Clearing Accounts Office with a Statutory Audit Office attached thereto was opened in December 1926 to take over the work relating to the check and appointment of traffic interchanged between state-managed railways.

Central Advisory Council for Railways—This is an advisory body which discuss all the problems concerning railways.

Railway Advisory Committees—These Committees have been formed in all railways with a view to associate the public in the management of railways.

Railway Rates Tribunal—This Tribunal has been established in 1948 in place of Railway Rates Advisory Committee. This is the important step by Government in the development of its freight policy. The Tribunal will decide the public complaints regarding the making or giving undue preference in rates or charges or refusal to quote a station-to-station rate. The Tribunal is authorised to entertain complaints that railway administrations are exercising discrimination, quoting unreasonable rates, attaching unreasonable conditions to the rates or are unreasonably refusing to quote a fair station-to-station rate. The Tribunal will deal only with freight rates and have mandatory jurisdiction. It consists of a President and two members. To assist the Tribunal, two panels of assessors is constituted, one representing trade, industry and agriculture and other railways.

Central Board of Transport—has been formed for the co-ordination of all forms of transport. The two main objectives of the Board are (1) maximum co-ordination of all forms of transport and (2) the matching of planning and execution of transport to the planning of general economic development. The Board's objective is to secure the optimum movement of goods according to priority and simultaneously relieve the strain on railways by harnessing other forms of transport.

Railway Staff College—A Staff College for training of railway officers was proposed to be established by Government at Baroda. Besides providing a course of training for probationary officers, the Staff College will have refresher courses for junior and senior officers and will accommodate upto 55 trainees at a time for the present.

Railway Research Council—has been set up in 1949 to explore the effective services of railways in relation to industry, agriculture, domestic and foreign trade. It will also investigate the operation of railways and will suggest improvements.

Tourist Traffic Committee—The Ministry of Transport has constituted in 1949 an *ad hoc Tourist Traffic Committee* consisting of the representatives of ministries concerned and tourist, transport and hotel industries. The committee advises the Government with regard to matters which affect tourists visiting this country. An American Tourist Promotion Group has also been formed on an informal basis consisting of tourist and six Travel Companies. Regional Tourist offices have been opened at Bombay, Delhi and Madras. It is proposed to issue Tourist Introduction Card to foreign tourists which will enable them to get essential facilities.

Railway Committees—Main Railway Committee was *Ackorth Committee* appointed in 1920 which made various recommendations for the improvement of Indian Railways. Its main recommendations were: (1) Railways to be managed by the State instead of Company management. (2) Railway Budget should be separated from the general budget and that the general revenues should receive annual contributions from railways. (3) Establishment of Rates Tribunal to adjudicate upon disputes between railways and the public.

The *Pope Committee* was appointed in 1932 which *inter alia* made many recommendations in regard to the intensive use of locomotives, coaching stock and machinery. Disposal of uneconomical wagons, combining resources between railways, ticket-less travel and methods of increasing earnings.

The *Wedgwood Committee* in 1936 made the following recommendations: (1) reduction in locomotives and carriage under repairs, (2) amalgamation of workshop for construction of rolling stock, (3) acceleration of trains, (4) withdrawal of unremunerative services, (5) greater caution in capital expenditure, (6) a campaign to root out dishonesty and incivility from amongst railway staff, (7) development of the commercial departments of railways, (8) building of a general Reserve Fund to serve as an equalisation fund for payment of interest charges and amortisation of capital.

Indian Railway Enquiry Committee—The Committee appointed by the Government of India published its report in 1948. The main findings and recommendations are—(*a*) the staff strength in the railways is on the high side while there has been general deterioration in the efficiency of workers, (*b*) in place of present central organisation under which the Railway Board is part of the Secretariat of the Government of India, the Committee recommended the vesting of control and management of Indian Government Railways in a Statutory Authority, (*c*) it is desirable to have in the Finance Branch of the Railway Board a separate unit primarily concerned with exploring means to improve earnings, (*d*) no capital outlay should be incurred other than on strictly financial considerations, except when a capital expenditure is justified on other important considerations, (*e*) an Amortisation Fund should be created (as recommended by the Wedgwood Committee) in respect of intangible assets of the railways amounting to about Rs. 68 crores, the annual contribution to the fund being one per cent of gross earnings, (*f*) the existing method of making *ad hoc* contribution to the General Revenues has to continue until the future position of the railways can be assured with greater definitions.

Railway Progress since Independence—In all departments, attempts are being made for improvements and productions covering every branch of railways. The main items may be summarised here:—

(*a*) 14 crore rupee *Chittaranjan Scheme* for the manufacture of locomotives have been started from where completely Indian made locomotive is expected to come out shortly.

(*b*) *Railway Amenities*—This is evident in improved third class coaches introduced in several railways.

(*c*) *Assam Rail Link*—The construction of 142 miles of rail link between Assam and the rest of India at a cost of 14 crores.

(*d*) A good number of third class coaches equipped with electric fans other conveniences.

(*e*) Introduction of Janata Express in important railways.

INDIAN UNION RAILWAY ROUTE MILEAGE

Class I Railways—		*Class II Railways—*	
Assam Ry. ..	.. 1,238·82	Barsi Light ..	.. 202·57
B. N. Ry. ..	.. 3,388·02	Gondal ..	.. 213·49
Bikaneer State Ry.	.. 883·05	Darjeeling-Himalayan	.. 146·51
B. B. C. I. Ry.	.. 3,403·98	Gaekwar's Baroda	.. 736·38
E. I. Ry ..	.. 4,379·60	Jaipur State ..	.. 253·47
E. P. Ry. ..	.. 1,877·58	Jamnagar Dwarka	.. 211·53
G. I. P. Ry. ..	.. 3,560·66	Junagad State ..	.. 229·22
Jodhpur Ry. ..	.. 1,125·69	Morvi ..	.. 172·54
M. & S. M. Ry.	.. 2,938·47	Sahdara-Saharanpur Light ..	.. 92·50
Mysore State Ry.	.. 738·27		
Nizam State Ry.	.. 1,384·24		
O. T. Ry. ..	.. 3,073·26		
S. I. Ry. ..	.. 2,349·25		
Total ..	30,340·89	Total ..	2,565·25

RAILWAY DEPRECIATION FUND

(*In Crores of Rupees*)

	Aprropriation to fund	*Withdrawals from fund*	*Net accretion in the year*	*Closing balance*
1949-50 ..	.. 19·17	11·73	7·44	109·01
1950-51 (Revised)	.. 33·69	31·09	2·60	119·37
1951-52 (Budget)	.. 33·60	2·60	—4·83	114·54

REVENUE RESERVE FUND

(*In Crores of Rupees*)

	Appropriation to Fund	*Withdrawals from Fund*	*Net accretions in the year*	*Closing balance*
1949-50 ..	.. ..	—	—	6·82
1950-51 (Revised)	.. 4·59	—0·02	4·61	12·79
1951-52 (Budget)	.. 12·44	—	12·44	25·23

RAILWAY DEVELOPMENT FUND

(In Crores of Rupees)

	Appropriation to Fund	*Withdrawals from Fund*	*Net accretions in the year*	*Closing balance*
1949-50	0·51	—0·05	0·48	13·80
1950-51 (Revised) ..	10·51	6·00	4·51	18·78
1951-52 (Budget) ..	10·62	8·29	2·33	21·11

COMPARATIVE FIGURES OF RAILWAYS*

	Indian Rys.	*British Rys.*	*U. S. Ry.*	*Canadian Rys.*	*Australian Rys.*
Capital (Crores)	812·99	1639·78	13,705·34	1633·19	381·24
Ry. Mileage ..	34,022	19,573	225,149	40,933	21,622
Gross Earnings (*Crores*) ..	258·31	435·34	4678·13	395·54	78·04
Total Gross Expenses (*Crores*)	207·08	418·40	3611·10	375·92	74·95
Operating Ratio	80·17%	96·00%	77·19%	95·0%	96·04%
Passengers carried (*Millions*) ..	1254·54	992·78	647·54	30·65	..
Freight carried (*mills. of ton*)	91·57	280·17	26776·76	133·29	36·09
No. of employees	899,285	624,528	1,345,000	186,982	121,975
Employees per route mile ..	26	32	6	5	6

RAILWAYS FINANCES

Operating Expenses

(Lakhs of Rs.)

1941-42	63,54	1947-48*	84,79
1942-43	68,98	1948-49	1,60,41
1943-44	90,10	1949-50	1,81,53
1944-45	1,23,34	1950-51 (Revised) ..	2,63,40
1945-46	1,45,09	1951-52 (Budget) ..	2,79,50
1946-47	1,56,67		

Contribution to Depreciation Fund

(Lakhs of Rs.)

1941-42	12,68	1947-48*	6,81
1942-43	12,57	1948-49	11,29
1943-44	16,87	1949-50	11,58
1944-45	17,01	1950-51 (Revised) ..	30,00
1945-46	17,05	1951-52 (Budget) ..	30,30
1946-47	13,21		

---

* Figures do not pertain to the same year of operation in each case but they are close enough to afford a fair means of comparison.

Source: *E. I. Ry. Magazine, 1951.*

Net Traffic Receipts

(Lakhs of Rs.)

1941-42	55,62	1947-48	8,76
1942-43	71,22	1948-49	39,78
1943-44	76,59	1949-50	41,44
1944-45	74,10	1950-51 (Revised)	52,85
1945-46	61,24	1951-52 (Budget)	62,53
1946-47	31,65		

Net Revenue

(Lakhs of Rs.)

1941-42	56,52	1947-48*	10,53
1942-43	73,10	1948-49	42,34
1943-44	79,37	1949-50	34,77
1944-45	77,34	1950-51 (Revised)	46,81
1945-46	65,38	1951-52 (Budget)	55,22
1946-47	35,04		

Contribution to General Revenues

(Lakhs of Rs.)

1941-42	20,17	1947-48*	..
1942-43	20,13	1948-49	7,34
1943-44	37,64	1949-50	7,00
1944-45	32,00	1950-51 (Revised)	32,57
1945-46	32,00	1951-52 (Budget)	55,22
1946-47	5,40		

Surplus or Deficit

(Lakhs of Rs.)

1941-42	28,08	1947-48*	—2,74
1942-43	45,07	1948-49	19,98
1943-44	60,84	1949-50	14,59
1944-45	49,89	1950-51 (Revised)	14,24
1945-46	38,20	1951-52 (Budget)	21,85
1946-47	8,52		

P.C. of Net Traffic to Capital-at-charge

Receipts

1941-42	7·4	1947-48*	1·3
1942-43	9·2	1948-49	5·7
1943-44	9·8	1949-50	5·6
1944-45	9·4	1950-51 (Revised)	6·5
1945-46	7·7	1951-52 (Budget)	7·5
1946-47	3·9		

---

* From 15th August, 1947 to 31st March, 1948.

Ratio of Working Expenses to Gross Earnings

(Lakhs of Rs.)

1941-42	58·1	1947-48*	89·2
1942-43	53·3	1948-49	79·8
1943-44	59·0	1949-50	81·7
1944-45	66·0	1950-51 (Revised)	80·8
1945-46	71·8	1951-52 (Budget)	78·0
1946-47	83·5		

Ratio of Net Profit on Capital at charge

(Lakhs of Rs.)

1941-42	3·7	1947-48*	—0·4
1942-43	5·8	1948-49	2·8
1943-44	6·5	1949-50	2·0
1944-45	6·3	1950-51 (Revised)	1·8
1945-46	4·8	1951-52 (Budget)	2·6
1946-47	1·1		

World's Railway Mileage in 1949

Europe	262,198	Australasia	31,999
America (North)	270,329	Africa	42,074
America (Central & South)	85,207	*Total*	783,679
Asia	91,872		

Railway Mileage of Leading Countries 1949

France	40,348	U.S.A.	227,244
Germany	36,256	Argentina	26,710
U.S.S.R.	57,487	Brazil	21,251
Canada	42,336	India	33,987

RAILWAY FACTS

India has the fourth largest railway system in the world, the U.S.A., U.S.S.R. and Canada being the only three countries with a larger mileage.

* * * * *

There are 72,000 Railway Stations in India.

* * * * *

The first Indian Railway was constructed between Bombay and Kalyan, a distance of 32 miles in 1853.

* * * * *

Third class passengers contribute 90 p.c. of the railway receipts.

* * * * *

First electric trains in India ran between Victoria Terminus (Bombay) and Kurla in 1925.

* * * * *

From April 1951, there is not a single railway system which is not owned by the Government in any part of India including what is formerly the Indian States.

* * * * *

---

* From 15th August, 1947 to 31st March, 1948.

Length of the Railways in the Indian States was 7,560 miles and their integration in the Indian Union has resulted in increasing the route mileage of Indian Government Railways to 33,987 miles.

* * * * *

Most Indian railway gauges are five feet six inches wide and they are the broadest in the world.

* * * * *

Indian Government Railways are by far the largest industrial concern under one management in the country. They are almost completely nationalised.

* * * * *

After partition, there are 33,987 miles of railways in India; on an average Indian railways carry about 1000 million passengers and 100 million freight-tons in a year.

* * * * *

The Railways' requirements for coal is 10 million tons annually.

* * * * *

There are four mountain railway systems in India—Nilgiri Mountain Railway, Matheran Hill Railway, Darjeeling Himalayan Railway and Kalka-Simla Railway.

* * * * *

B. N. Ry. was started in 1889 and was taken over by the State from Oct. 1, 1944. E. I. Ry. was first started in 1854 and was taken over by the Government on July 1, 1925. G. I. P. Railway was first started in 1853, the earliest railway in India and was taken over by the Government on June 30, 1925. M. S. M. Railway came under State management on 1st April, 1944. O. T. Railways was opened in 1885 and came under Government control from Jan. 1, 1943. S. I. Railway came under Government management from April 1, 1944.

* * * * *

Down Kalka-Delhi-Howrah Mail is the fastest train on E. I. Ry. with an average speed of 48 m.p.h. miles between Calcutta and Delhi covering 902 miles in 25 hrs. 45 m.

* * * * *

Railway Board came into existence in March, 1905.

* * * * *

With a capital of 672 crores of rupees invested by the State, the Indian Railways are one of the largest enterprises of the world.

* * * * *

The inauguration of the electrified main line section of the G. I. P. Railway from Kalyan to Poona took place on 5th November 1929 and constituted the first entirely main line of track to be electrified.

* * * * *

Of the total route mileage of railway in India roughly about one-half is in the Indo-Gangetic Valley.

* * * * *

The busiest Indian railway is the East Indian Railway.

* * * * *

The first air-conditioned coach to run in public service in India was attached to an Indian train in 1937 between Bombay and Delhi.

* * * * *

The integration of Indian States has added 7,500 route miles to the Indian Government Railways.

* * * * *

2. ROADS IN INDIA

Utility of Roads in India—The importance of roads and the facilities of transport in a vast country like India can scarcely be exaggerated. A system of well-kept and well-constructed roads is essential for country's economic and cultural progress. The roads have also a vital role to play in the defence of India. Ours is a vast country and it is not possible to post military units in every point of the land. The effectiveness of defence depends on the ability of our armed forces to concentrate at any threatened point within shortest possible time. So the effectiveness of our defence to a large extent depends on the efficiency of our road system. India's deficiency in the matter of roads has contributed very largely to her agricultural commercial and industrial backwardness to-day. The most serious defect is the lack of proper and adequate road communication between villages and markets. Another aspect of the inadequacy of our road system is that it is unbalanced. The trunk roads are, for example relatively more highly developed than the district and village roads.

Short History of Road Progress—The present road system is a superstructure raised on the old Mughal and other roads. Its development began about one hundred years ago under the auspices of the Government of India. But Government's entire energy being directed towards opening of railways and roads came to be regarded as of local importance, a fit subject for devolution. The culmination of the lack of interest was reached in the Government of India Act of 1919 which transferred the subject to the provinces. The Central Government ceased to concern itself with road development except for roads of military importance and certain arterial roads in Indian States, the provinces in their turn placed greater part of road mileage in the charge of local bodies taking direct responsibility for the maintenance and construction of only a strictly limited mileage.

But the circumstances changed after the World War I. Motor transport began to come in the forefront and it became a common feature on the principal roads throughout the country. The result was that the road expansion could not keep pace with the increase of motor traffic and the existing roads began to deteriorate. A resolution was carried in the Council of State in 1927 for the improvement of road system with the result that a committee of both the chambers of the Central Legislature was set up under the chairmanship of Dr. M. R. Jayakar to investigate and report. The Jayakar Committee in 1928 reported that onus of road development was passing beyond the capacity of provincial governments and local bodies, that it was becoming a matter of national importance, and to that extent might be a proper charge on central revenues. The Committee recommended that Centre should assist co-ordinated development by making annual block grants to provinces from out of a Central Road Fund built up by a petrol tax surcharge of two annas per gallon. The Jayakar Committee also recommended the setting up of (*i*) a separate Road Development in the Central Government, (*ii*) a Transport Advisory Committee consisting of the representatives from Central Government and the provinces, (*iii*) a Central Organisation of Information and Research. A *Central Road Organisation* was set up in 1930 and a *Transport Advisory Council* in 1935. On the recommendation of the Jayakar Committee, also a Road Conference first met in 1931 to discuss various technical matters.

Road Administration—since 1919 the provinces have been solely responsible for the maintenance and construction of roads. The Central Government's interest in roads was confined to sanctioning block grants to the provinces from Central Road Fund. From 1st April, 1947, the Central Government have assumed additional financial responsibility for the construction and maintenance of every road which is accepted by the Central Government as a National Highway—The subject "National Highways" has now been included in the Federal List of the Constitution of India.

The provincial highways are generally under the charge of provincial Public Works Departments.

The district and village roads have for many years been the responsibility of the local bodies.

Central Road Fund—The creation of Central Road Fund in 1929 on the recommendation of Jayakar Committee constitutes a milestone in the history of road transport in India. The Road Fund was to be administered by the Central Government with the advice of a standing committee of the Central Legislature. Part of the fund—one sixth—was to be reserved for central administration, research, intelligence and grants for undertakings of special or all-India importance. The balance of the fund was recommended for allocation to the provinces and States according to the consumption of petrol in each administrative unit. Block grants to the provinces from the fund were intended to augment principal allotments for road development.

Nagpur Plan—In December, 1943, a Conference of Chief Engineers was convened by the Government of India at the instance of the Indian Road Congress. This conference is an important landmark in the history of Indian roads so far as the road development in India is concerned. This conference drew up a ten-year plan of road development which is known as *Nagpur Plan*.

The Conference classified roads under the following heads—*National Highways, Provincial or State Highways, Major District Roads, Minor District Roads* and *Village Roads*. National Highways is to be the framework for the country's road system. The *National Highways* will connect capitals of provinces and States, ports and foreign highways and constitute the main arteries of communication in the country. They will include roads of strategic importance. The *Provincial or State Highways* will be the main trunk roads of a province or state. *District Roads* will connect areas of production and markets with either a highway or a railway. They will also form the main links between headquarters of neighbouring districts. *Minor District Roads* and *Village Roads* will mostly meet the requirements of rural population, they connect villages and group of villages with one another and with nearest district road or river ghat.

The plan is based on the estimated requirements for the first 20 years of postwar period. The total mileage and cost of the plan are as follows—400,000 miles of roads, highways etc. at the cost of Rs. 450 crores.

Nagpur plan recommends the assumption by the Central Government of complete financial liability covering both fresh development and annual maintenance for roads designated as National Highways. These are to be administered by an impartial Road Board. With the effect from 1st April, 1947 complete financial liability for the construction and maintenance of every road which is classified as a National Highway has been undertaken by the Government of India.

Proposed National Highway routes generally follow the existing trunk roads which are already largely surfaced. The total mileage of National Highways is about 13,300, out of which 2,400 miles are in the Indian States. These include *Grand Trunk Road North* (Delhi-Amritsar-Pakistan-border), *Grand Trunk Road East* (Delhi-Agra-Kanpur-Calcutta), *Bombay-Madras Road, Calcutta-Madras Road,* and *Banaras-Cape Comorin Road.*

Indian Roads Congress—The Central Government took steps to promote the creation of a semi-official body known as *Indian Roads Congress* in 1934. The membership of the body is open to qualified engineers dealing with roads. The Roads Congress is designed to provide a forum for the regular pooling of experience and ideas on all matters affecting the construction and maintenance of roads, to recommend standard specifications, and to provide a platform for the expression of professional opinion on matters relating to road engineering, including such questions as those of organisation and administration.

Beginning with a modest membership of 74 in 1934, the Congress has now no fewer than 1250 members representing engineers of all ranks.

The most important contribution of Indian Roads Congress to the science of road engineering in India besides the study of roads from various aspects is the "standard specifications and Code of Practice for Road Bridges in India" which has been accorded general acceptance throughout India. When the highway engineers got busy to complete the projects and were ready with their blueprints to start work, a sudden set back came in the shape of the partition of India which dislocated all transport and various organisation concerned with the procurement of road materials. The financial stringency of the Government of India compelled the progress to slow down. As a result, in the period of three years from 1947, not even one hundredth part of the Nagpur target of building and improving roads could be completed.

Bullock Cart—The bullock cart remains for centuries the main instrument of transport throughout India. These carts are mostly filled with narrow iron-tyred wheels with primitive hub and wheel arrangements. The advent of motor transport however is gradually replacing the use of bullock carts. The bullock carts generally do not pay any tax excepting those operating in municipal areas. The greatest defect of the bullock carts is the destructive effects of its iron-tyred wheels.

Road Transport—Motor vehicles are now playing an important part in the road transport of India and are slowly replacing bullock-cart. Direct taxation of motor vehicles is a state subject in India. The basis of taxation varies from state to state. In addition to state taxes, municipalities also impose wheel taxes on vehicles in Bombay, and the Madhya Pradesh. Indirect taxes on vehicles are levied by Central Government in the shape of import duty on motor vehicles and spare parts, import and excise duty on pneumatic tyres and import and excise duty on petrol. A sales tax is also levied on petrol in all provinces.

Under Indian Motor Vehicles Act, 1937 each province is divided into two or more regions with a *Regional Transport Authority* in each such region. To co-ordinate the work of Regional Authority there is in addition a *Provincial Transport Authority* in each province. The Act has also provided for compulsory insurance of motor vehicles in respect of third parties.

Nationalisation of Transport—About all the major states of India have accepted nationalisation of bus services as a basic policy and many have reached a stage where they have nearly taken over the entire private bus transport in their area. The process of nationalisation is not uniform throughout India. In Bombay and Madhya Pradesh, the nationalised service is operated by a quasi-public corporation. In Punjab, Uttar Pradesh and Madras the motor services are run departmentally, but except Madras State Services extend over muffasil routes also. Orissa has a similar service covering three of the five zones into which the state is divided for the purpose. West Bengal has started state bus services in Calcutta. Among the former Princely States, many are already operating government owned bus services. The Delhi bus service is carried on by Transport Ministry of the Government of India under an autonomous statutory body called Delhi Road Transport Authority.

Government Organisations—At the Centre, the Government have built up the *Central Roads Organisation* under the Consulting Engineer to the Government of India (Roads). The Roads Organisation activities are not confined to National Highways, it tackles a host of other problems concerning road development in general, grants to provincial governments, for development of roads other than National Highways, road research, road statistics, bulk procurement of machinery and overseas training of road engineers.

A *Central Road Research Institute* with suitable equipment and testing appliances including a Road Test Track has been started near Okhla on the Delhi-Agra Road under the auspices of the Council of Scientific and Industrial Research.

Road-Rail Co-ordination—Much headway has been made towards road-rail co-ordination and re-organisation of road transport—(1) city bus service of Madras has been entirely nationalized. (2) Bombay is the first State in which State Transport Corporation financed jointly by the Central and State Governments has been established with the object of providing adequate economical and efficient road transport services. (3) Government of West Bengal has set up a Directorate of Transport to work out *inter alia* schemes for the nationalisation of the passenger transport system in Calcutta and for the co-ordinated development of rail and road transport in the State. (4) Uttar Pradesh Government Roadway Organisation has introduced bus services on several new routes. (5) Punjab Government has started operation of passenger transport services in certain cities and over few rural routes. (6) Government of Himachal Pradesh has nationalized almost all road transport services. (7) In Delhi the Government has taken over the bus service from Gwalior and Northern Indian Transport Company.

Road Mileage in Various Countries in Relation to Area and Population

	Mileage of motorable roads	*Mileage of unmotorable roads*	*Total mileage of roads*
India	181,406	57,575	239,081
U. S. A. (1940) ..	1,000,000	2,009,000	3,009,000
U. K. (1939) ..	160,120	19,170	179,290
France (1939) ..	..	..	405,028

Indian Union's Road Development Plan

	Existing	*Nagpur plan*
Total Road mileage (1943)	239,081	385,226
Motorable road mileage (1943)	181,406	289,855
Total road mileage per million persons ..	749·89	1,208·18
Motorable road mileage per million persons ..	568·99	909·14
Total road mileage per 1,000 sq. miles of area ..	196·45	316·53
Motorable road mileage per 1,000 sq. mile of area	149·06	238·17

(*From Govt. of India pamphlet "Our Roads"*)

Mileage of Extra Municipal Roads in India

(on 31-3-1944)

	Total Surfaced	*Total Unsurfaced*	*Grand Total*
Provinces & Centrally administered area ..	97,547	202,173	299,720

(*From Govt. of India pamphlet "Our Roads"*)

Imports of Motor Vehicles in India

1943	7,262	1946	8,376
1944	113	1947	22,407
1945	7,811	1948	40,379

Imports of Cycles

1942-43	16,134	1945-46	76,141
1943-44	28,355	1946-47	212,554
1944-45	37,391	1947-48	261,358

No. of Motor Vehicles in India (Excluding States)

1942-43	121,282	1945-46	144,649
1943-44	131,069	1946-47	168,386
1944-45	142,172		

Road Accidents in India

	Fatal	*Total Accidents*		*Fatal*	*Total Accidents*
1942-43 ..	715	3,869	1944-45 ..	1,135	8,009
1943-44 ..	953	6,527	1945-46 ..	1,644	10,679

3. WATERWAYS

From ancient times, the trade and commerce of northern India has been facilitated by the abundance of navigable streams. The combined mileage of the navigable rivers in northern India is about 26,000. The inland navigation of India which was flourishing, received a great set-back with the development of railways in India.

In the past, India has been great sea-faring country. The British Governor-General in 1880 reporting in London said "the port of Calcutta contains 10,000 tons of shipping built in India of a description calculated for the conveyance of cargoes to England." Sir William Digby in his *'Prosperous British India'* wrote that the teakwood vessels of Bombay are greatly superior to the 'oaken' walls of old England.

Sub-continent of India has three great river systems with large number of minor streams which so long carried the inland navigation. Of this, Indus has practically gone to Pakistan. The Ganges from Hardwar to the Bay of Bengal passes through rich alluvial plains and offers unique advantage for splendid inland navigation. Brahmaputra also offers excellent chance of navigation. It is navigable throughout the year from its mouth to Dibrugarh which is about 800 miles from the sea.

Navigation canals are very few in India. The principal navigation canals are Eastern and Circular Canals of Bengal, Orissa Coast Canal and Buckingham Canal, and Ganges Canal running from Hardwar to Kanpur. There are also some combined irrigation and navigable canals in some of the states. There are less than 4,300 miles of navigable canals in India. There are also important water-ways in West and East Bengal which have made Calcutta the largest sea-port in India. The total length of waterways in India and Pakistan amounts to 25,000 (about) comprising 10,000 miles of rivers and 15,000 miles of canals.

Indian Constitution and Waterways.—The fact that the water transport had all along been a provincial subject, has been responsible for the lack of unified policy and of integrated care and development. The Republican Constitution has made inter-state rivers and waterways a central subject. The treatment of the river as unit, irrespective of political boundaries will help its rational development. The planning and development of water-transport has been entrusted to the Central Water Power Irrigation and Navigation Commission. Navigation Branch of the CWINC undertakes traffic surveys on existing and new waterways and is investigating the possibilities of opening up new waterways and extending old ones. The responsibility of surveying, planning and developing the country's water transport has been assigned to the Central Waterpower Irrigation and Navigation Commission.

Several multi-purpose projects are now in progress which will help to develop navigation in India. Navigation is now difficult in several places because dry weather discharges of the rivers are too little for use even by small country boats. River conservancy measures under multi-purpose schemes will make it possible for navigation to become an important transport industry in India.

Dams & Waterways.—The construction of the Hirakud dam in Orissa, it is stated, would make the Mahanadi navigable for 300 miles down the sea. The Kakrapara project in Bombay provides for navigation from the sea-face near Surat upto the reservoir of the dam at Kakrapara and 50 miles further inland. Similarly, the Damodar valley project in Bihar and West Bengal envisages the construction of a navigation canal linking up the lower Raniganj coal-fields with the Hooghly. The Central Waterpower, Irrigation and Navigation Commission is also actively considering the revival of water traffic on other navigable rivers, for example, on the Ganga from Buxar to Allahabad, and on the Goghra, upto Bahramghat. Investigation carried out by CWINC also show that it is possible to connect the western and eastern coast of India by inland navigation channels. Similarly it is possible to connect Assam and West Bengal by a dual-purpose water course.

Ganga Barrage Project which is in an advanced stage of investigation includes the construction of a canal, taking off above the barrage and meeting Bhagirathi near Jhangipur. This will establish a navigable route from Bay of Bengal right up to the hinterland of Bihar and Uttar Pradesh.

4. AVIATION IN INDIA

Beginning of Civil Aviation in India—Flying began in India as early as 1911 when the first experimental flights were made by army officers in aeroplane sent to India for demonstration by Bristol Aeroplane Co. On February 1911, M. Picquet a French pilot made demonstration flights in India and carried the first official air-mail not only of India but in the world when he flew from Allahabad to Naini, a distance of six miles carrying only official air-mail. The first passenger to be carried in an aeroplane in India was Sir Sefton Branker in 1911.

After the end of World War I in 1918, the real progress of civil aviation began in India. The first flight from Egypt to India was accomplished in November and December 1918 by Capt. Ross Smith and this was followed in January 1919 by flight from England to India by Squadron-leader McLaren and Lt. Haley. At the end of the same year Capt. Ross Smith and Lt. Keith Smith made first flight from England to Australia passing through India. The first regular air-mail service in India was organised in Jan. 1920, but this experiment lasted for six weeks. In 1925, Air Ministry in England had given a contract to the Imperial Airways Ltd. for a service between England and India.

In India Civil Aviation Department was formed in 1927; first civil aerodromes were established and flying clubs were also founded and some Indian officers were sent abroad for training for future service in the Government Civil Aviation Service.

By 1929-30 India began to occupy a prominent place on the air map of the world due to rapid development of world air transport. In March, 1929 the England-India Air Service, conceived in 1925 started after many difficulties and international complications. First internal air line in India ran from Karachi to Delhi as a continuation of the service from London to Karachi.

At this time flying clubs of India began to be started in different provinces which greatly contributed to the training of aviation among young Indians. By the end of 1930 six clubs were in active operation with the financial support of the Government and pilots and engineers were being trained for commercial aviation.

The internal air services were opened from Karachi to Colombo and from Karachi to Lahore in 1932 by Tata Sons Ltd. and Indian National Airways respectively. The companies were given contracts for the carriage of mails.

In 1933 both internal and external air service began to take definite shape in India with participation of Indian Continental Airways Ltd. In Dec. 1934 Qantas Empire Lines Ltd. linked London with Australia *via* India and Singapore.

British Government at this stage introduced 'all-up' air-mail scheme which greatly increased the development of air transport in India. Under this scheme the whole of commonwealth letter mail was transferred to the air by most of the governments and territories on the Australian and African route. This made possible the stepping up of two feeder services in India—Karachi-Colombo and Karachi-Lahore. The total route mileage operated by Indian Companies in 1938 was 5,190. The companies operating were Tata Sons, Indian National Airways and Air Services of India.

With the outbreak of war in 1939, the development of aviation in India was phenomenal. The Indian Civil Aviation made large contribution to the war effort. With the entry of Japan in the war, the military demand for air transport became so urgent that it was impossible for civil companies to carry on their normal traffic and finally they became contract-operators for the Defence Services.

Under the pressure of war, a beginning was made with the creation of an aircraft manufacturing industry. The *Hindustan Aircraft Ltd.* subsidised by the Government built a modern aircraft factory at Bangalore fully equipped for the quantity production of the aircraft.

At the end of the war, India possessed several hundred aerodromes, many with 2000 yards concrete runways.

Organisation of Civil Aviation in India—The foundation of civil aviation in India was laid by the Government of India following the first World War. At first work pertaining to Civil Aviation was dealt with by a branch of Industries and Labour Department known as Indian Air Board and assisted in technical matters by Royal Air Force. In 1919 India signed for International convention for Air Navigation.

In 1927 *Civil Aviation Department* was formed and a Director of Civil Aviation was appointed for the control and development of civil aviation. The organisation of the Civil Aviation Department before the World War II comprised a Director of Civil Aviation, a Deputy Director and some technical advisers. But after the end of World War II, the Department was reorganised. The reorganised department of the civil aviation was placed in charge of a Director-General, assisted by two Deputy Directors General and the functions of the Department were distributed among seven directorates, each responsible for several branches of civil aviation activity.

The Civil Aviation Department is at present attached to the Ministry of Communications which controls the Posts and Telegraphs Department which utilise air transport for the carriage of mails and the *Air Transport Licensing Board* which is an independent body vested by statute with authority to grant, amend, suspend revoke licences to Indian operators for the operation of all scheduled air transport services, whether internal or international and to specify conditions to govern the operation of such services.

Indian Air Force is in the Ministry of Defence but civil aviation is not entirely independent of military aviation. In order to co-ordinate policy with respect to civil and military aviation and to maintain the necessary liaison, a Standing Committee has been constituted comprising officers of the Ministeries of Defence and Communications who meet as necessary for the settlement of important questions of policy.

The *Director General of Civil Aviation* is the administrative authority for controlling all civil aviation activities in India except the licensing of scheduled air transport. He is at present assisted by the three Deputy Directors General.

The Department is constituted by seven Directorates, each in charge of a Director who is responsible to one or other of the Deputy Directors General. These are—(1) Directorate of Administration, (2) Directorate of Air Transport, (3) Directorate of Training and Licensing, (4) Directorate of Aeronautical Inspection, (5) Directorate of Air Routes and Aerodromes, (6) Directorate of Communications, (7) Directorate of Regulation and Information. In addition there is a chief inspector of accidents.

Air Routes and Aerodromes—In 1931 India started the air routes and aerodromes organisation with a nucleus of four controlled aerodromes at Karachi, Delhi, Allahabad and Calcutta. The foundation of Air Traffic Control Service in India was then laid with four aerodrome officers taking control of four aerodromes. Gradually more and more aerodromes were constructed and network of aerodromes and air traffic control were provided for the main trans-Indian route and main internal air routes.

Following the outbreak of hostilities in the east during the World War II, a well-organised system of aerodromes and air routes were developed by the military authorities with the co-operation of the Civil Aviation Department. During the war the construction and maintenance of aerodromes, the standard of ground facilities and the air traffic control improved considerably. Thus after the war, civil aviation department was able to resume the normal activities with large number of aerodromes in the country for potential civil use.

Air Traffic Control Organisation—India being a member of the International Civil Aviation Organisation, has to meet standards laid down by the Organisation in respect of aerodromes, equipments and air traffic control facilities. The Air Traffic Control Organisation is responsible for the safety and control of aircraft in the air and on the ground. The Organisation is established to promote safe, orderly and expeditious flow of air traffic.

For this Air Traffic Control, the country has been divided into four regions with Area Controls at Delhi, Calcutta, Bombay and Madras. The Air Traffic Control System is modelled on the standards and recommended practices laid down by the I.C.A.O.

Aerodromes required for all-India air communications are developed and maintained by the Central Government and with the accession of Indian States, Central Government has taken up the responsibility for the maintenance and development of these state aerodromes.

Internal Air Transport—At the outset the air transport in India was progressing at a slow pace, but after the end of the World War II, the progress has been almost phenomenal. When the war came to a close, there were in India only two air line services, *i.e.*, the Tata Sons Ltd., and the Indian National Airways which were operating since 1932. At the end of 1945, the Government of India decided to restore commercial air transport from January 1, 1946. Under a guarantee by government of a fixed percentage of capacity revenue on their services the above two companies began to operate again. The commercial air services became so much successful that several new companies rapidly came into the field. All air services are now operated on a purely commercial basis, depending entirely on the revenue earned. The guarantee agreement with Tata Sons and I.N.A. has come to an end.

With the increase of air traffic, with a view to safeguard the interest of the public and to ensure economic and orderly development, the Government at first introduced Air Transport Licensing Rules and in July, 1946 set up Air Transport Licensing Board. No scheduled air service could be operated after October 1, 1946 except under license granted by the Board.

Passenger fares on Indian scheduled air services have been fixed at a minimum rate of four annas per passenger mile.

Internal Air Mails—In order to speed up the carriage of mails on routes where air transport was available and to help the air lines to secure more revenue load, a scheme for the carriage of all first class internal mails by air, without surcharge was introduced with effect from 1st April 1949. Under this scheme 28 p.c. of all internal mails are being carried by air. Further, as part of the general plan to exploit the full possibilities of the all-up mail scheme, night air services were introduced between Delhi, Madras, Calcutta and Bombay via Nagpur with the effect from the 31st January, 1949.

External Scheduled Air Transport—Before the beginning of World War II, British, Netherlands and French companies were operating scheduled air transport services to and across India. Most of these were interrupted during the war years, but now regular services have been again resumed. Bilateral air transport agreements have been concluded with U.S.A., Netherlands, France, Sweden, Pakistan, Ceylon, Australia, Switzerland and Phillippines. Provisional agreements have been concluded with United Kingdom, Iran, Thailand, Egypt, Ethiopia, Norway and Denmark whereby air lines of these countries are permitted to operate to and across India on a reciprocal basis.

Indian International air services are also operating outside India. The most important Indian international air service is the Air India International formed in 1947 and managed by Air India Ltd. which is a joint government-company enterprise. The Government of India have three directors in the board out of six. The company is operating regular service between United Kingdom and India. Licenses have also been granted to wholly Indian owned companies for the operation of air services to other places outside India such as Bharat Airways.

Government Air Organisations—(1) *The Aeronautical Communication Service* of the civil aviation department was formed in 1946. The service is meant to provide aeronautical communication and navigation facilities for safe, regular and efficient operation of civil air transport. For the operation of the Aeronautical Communication Service, the country is divided into four regions, the boundaries of which coincide with the regions for Air Traffic Control purposes. The Communication Directorate with its headquarters in New Delhi, controls the regional centres at Bombay, Calcutta, Delhi and Madras. The basic unit of the Aeronautical Communication Service is the communication station. The station provides all communication facilities for a particular aerodrome. Aeronautical Communication Service has now been able to establish, 43 stations with modern communication facilities, (2) *Air Tariff Control Organisation* is responsible for the safety and control of aircraft in the air and on the ground. The Air Traffic Control system is modelled on the standards and practices laid down by the International Civil Aviation organisation. (3) *Aerodrome and Air Route Service* is responsible for the construction and equipment of aerodromes, their planning, administration and regulation, the organisation of flying control and search and rescue operations. The service was first organized in 1931.

Aviation Training and Flying Clubs—The *Communication School* started at Saharanpur in 1946 which trains radio operators and technicians was transferred to Allahabad in 1950. (2) The Civil Aviation Training Centre, Allahabad now comprises four wings—(*i*) Flying School, (*ii*) Aerodrome School, (*iii*) Engineering School, (*iv*) Communication School. This school provides facilities for the training of commercial pilots, ground engineers, aerodrome officers and communication staff. (3) There are at present eleven subsidised flying clubs with their headquarters at Delhi, Lucknow, Patna, Bhuvaneswar, Barrackpur, Madras, Bombay, Hyderabad, Bangalore, Nagpur and Jullundur Cantt. under subsidy agreements of the Government of India. In addition two flying centres at Allahabad and Kanpur are in operation as satellites of the Hind Provincial Flying Club Ltd., Lucknow. (4) One non-subsidised flying club at Jodhpur. (5) The Indian Gliding Association has been started in Bombay under Government subsidy. (6) Steps are being taken to start model aeroplane clubs in Colleges and Universities to make the younger generation airminded. (7) The Aeronautical Society has been formed in 1948 including in among its members scientists, engineers and technical personnel of the Civil Aviation Department to spread knowledge of aeronautical sciences and air craft engineering. (8) Technical schools, run by the pioneer airlines are now training engineer-apprentices to cope with specialized maintenance and overhaul aviation work. (9) Government Communications School at Saharanpur is turning out qualified radio operators and ground crew. (10) An engineering school and repair organisation is to be started at Barrackpur.

Payment of Subsidies—From March 1, 1949 the Indian air transport companies, flying clubs and other air operators have been receiving financial assistance from the government at the rate of nine annas per gallon of petrol used in flying within India and Pakistan in order to enable the companies to accept twenty-five per cent more revenue load.

International Relations—India has continued to take part in the International Civil Aviation Organisation and was again elected to its Council for a period of three years. Bi-lateral Air Transport Agreements have been concluded with Australia, Ceylon, France, Netherlands, Pakistan, Philippines, Sweden, U.S.A. and Switzerland and some other countries.

Research & Development—A small research and development organisation was established by the Civil Aviation Department in April 1946. This organization is mainly concerned with research on engineering problems relating to aircraft and aeronautics. A research and test Laboratory has been constructed in New Delhi.

Meteorological Service in Aviation—The meteorological department of the Government of India is responsible for providing meteorological service for aviation in India. The meteorological organisation for aviation in India is designed to provide meteorological service for aircraft commanders, for all international, major and minor aerodromes in India and for all persons concerned with aircraft operation. Meteorological centres on air routes are classified into 5 types—

(*a*) Provincial forecast centres located at Bombay, Calcutta, Delhi, Nagpur and Madras which maintain forecast and weather watch for 24 hours and prepare weather charts.

(*b*) Dependent Forecast Centres located at Ahmedabad, Allahabad, Bangalore, Hyderabad, Jodhpur, Lucknow and Vizagapatam which maintain forecast and weather watch from dawn to dask or as required and prepare weather chart.

(*c*) Auxiliary Meterological Centres—At present there are 10 stations of this type at Bhopal, Bombay (Juhu), Calcutta (Bally Bridge), Cochin, Gaya, Jamnagar, Jharsuguda, Srinagar, Amritsar and Bhubaneswar. They normally supply local weather reports and latest available current weather reports of the surrounding aerodromes on scheduled air routes.

(*d*) Pilot balloon observatories—at present there are 47 pilot balloon observatories in India, most of them are located at or near airfields.

(*e*) Current Weather Observatories—at present there are 31 meteorological centres of this type in India which maintain current weather watch at aerodromes and supply weather reports.

Development of Aerodromes—The *Aerodromes and Air Route Service* is responsible for the construction and equipment of aerodromes, their planning, administration and regulation, the organisation of flying control and search and rescue operations. The service was first organised in 1931 with a nucleus of four controlled aerodromes at Karachi, Delhi, Allahabad and Calcutta. There are as many as 70 airports in India which are maintained and managed by Civil Aviation Directorate. Three out of 70 airports—Calcutta (Dum Dum), Bombay (Santa Cruz) and Delhi (Palam) are renowned international aerodromes, the former two lying on the world routes for East and West international link. The aerodromes at Calcutta (Dum Dum), Bombay (Santa Cruz), Bombay (Juhu), Delhi (Palam), Delhi (Sefdarganj), Madras (St. Thomas Mount), Tiruchirapalli, Vishakhapatnam, Agartala and Ahmedabad are the declared customed airports of the country.

Report of the Air Transport Enquiry Committee—The Government of India appointed a committee for the reorganisation of the Air Transport in India in view of the many defects and shortcomings which was issued in 1950. The main recommendations are as follows—(*a*) There are too many scheduled air lines which should be reduced by the merger of companies and elimination of provisional licence holders (*b*) Routes are to be redistributed (*c*) companies who would continue to receive a petrol subsidy would be required to reduce costs of operation to the reasonable standards laid down by the Committee and to confirm to a new schedule of freight-mail rates and passenger fares, the last slightly higher than todays.

As regards the question of State ownership of air services, the Committee is of the view that there is no justification to break away from the existing set-up in which air services are operated by private companies. The Committee, however, has suggested that if after a fair working of its reorganisation scheme, the companies yet continue to incur losses, thus retarding development, then at the end of five years, the question of nationalisation should be considered.

AIR STATISTICS

The comparative figures show air operation undertaken and the traffic carried by Indian air transport companies in 1950 and the four preceding years.

Year	*Hours flown*	*Miles flown*	*Passengers carried*	*Freight carried (lbs.)*
1946 ..	29,539	4,520,046	105,251	1,885,726
1947 ..	59,912	3,361,673	254,960	5,647,562
1948 ..	78,961	12,648,765	341,186	11,968,736
1949 ..	93,943	15,098,354	357,415	22,499,679
1950 ..	117,422	18,896,139	452,869	80,006,755

Year	*Mails carried (lbs.)*	*Capacity Ton miles operated*	*Revenue load Ton miles carried*
1946	1,026,403	8,536,457	6,391,219
1947	1,405,073	18,596,778	14,355,164
1948	1,582,645	26,320,058	19,295,532
1949	5,031,959	36,538,338	23,249,052
1950	8,356,144	52,251,865	34,414,327

These figures show all round increase from 1949 to 1950. Freight and mails increased by 256 per cent and 66 per cent respectively, and capacity ton miles operated and the revenue load ton miles carried, by 43 per cent and 48 per cent respectively. The number of passengers carried by air increased by about one lakh, while the freight in 1950 went up by about 58 lakhs.

1951 Progress—According to official report, Indian air lines flew 9,381,946 miles on scheduled services carrying 229,326 passengers and 16,200 tons of freight during the first half of 1951. The capacity operated during this period was 27,203,382 ton miles against previous (1950) half-years figure of 26,197,116. At the end of this period eight Indian companies were operating scheduled services, internal and international, covering an unduplicated route mileage of 26,205 as against 23,062 on June 30, 1950. At the end of June, seventeen companies were holding permits for operating non-scheduled air services.

Total number of aircraft registered in India at the end of June, 1951 was 738 and 202 aircraft held current certificates of airworthiness.

New aerodromes were opened at Muzaffarpur, Ranchi, Kotah during first half of 1951, thus bringing the total number of aerodromes maintained by Civil Aviation Department to 75

INDIAN AIR SERVICES

Air India Ltd. Bombay—
- Bombay-Karachi-Bombay
- Hyderbad-Madras-Colombo
- Bombay-Delhi
- Bombay-Madras-Colombo
- Madras-Bombay
- Bombay-Ahmedabad-Jaipur-Delhi
- Bombay-Calcutta-Bombay

Madras-Bangalore-Cochin-Trivandrum

Indian National Airways Ltd., New Delhi—

Delhi-Srinagar-Delhi
Delhi-Karachi-Delhi
Delhi-Calcutta-Delhi
Delhi-Jodhpur-Karachi
Calcutta-Rangoon
Delhi-Lahore-Delhi
Calcutta-Katmandu-Calcutta
Katmandu-Patna-Katmandu

Air Services of India Ltd., Bombay—

Bombay-Keshod-Porbandar-Jamnagar-Bhuj-Karachi
Bombay-Bhopal-Kanpore-Lucknow
Jamnagar-Wadhwan-Ahmedabad
Bombay-Gwalior-Delhi

Deccan Airways Ltd., Begumpet—

Delhi-Bhopal-Nagpur-Hyderabad-Madras
Hyderabad-Bangalore-Hyderabad
Hyderabad-Bombay-Hyderabad
Bombay-Calcutta-Bombay

Himalayan Aviation, Calcutta—

Madras-Nagpur-Delhi
Madras-Nagpur-Bombay
Madras-Nagpur-Calcutta

Mistri Airways Ltd., Bombay—

Bombay-Bangalore
Bombay-Baroda-Bhavnagar-Ahmedabad
Bombay-Jodhpur
Bombay-Rajkot-Morvi
Bombay-Bangalore

Airways (India) Ltd., Calcutta—

Calcutta-Bhubaneswar-Vizagapatam-Madras-Bangalore
Calcutta-Bagdogra-Gauhati-Dibrugarh.
Calcutta-Dacca
Calcutta-Nagpur
Calcutta-Bombay

Bharat Airways Ltd., Calcutta—

Calcutta-Patna-Banaras-Lucknow-Delhi.
Calcutta-Allahabad-Kanpur-Delhi
Calcutta-Agartala

Dalmia-Jain Airways—

Delhi-Amritsar-Srinagar

Indian Overseas Airlines (Star Line), Bombay—

Nagpur-Hyderabad-Madras
Nagpur-Jubbulpur-Allahabad-Kanpur-Lucknow
Madras-Lucknow-Madras
Calcutta-Nagpur-Bombay

Kalinga Air Lines—

Calcutta-Bhubaneswar

Air Survey of India, Dum Dum.
Indamer Co. Ltd., Bombay.
Jamair Co. Ltd., Jamnagar.

National Air Markings

Argentina	LV	Dominician Rep.	HI	Mexico	XA, XB
Australia	VH	Eire	EI, EJ	Netherlands	PH
Austria	OE	Finland	OH	Norway	LN
Belgium	OO	France	F	Pakistan	AP
Brazil	PP, PT	Iceland	TF	Paraguey	ZP
Burma	XZ, ZY	India	VT	Peru	OB
Canada	C.F.	Indonesia	PK	Philippines	PI
China	B	Iraq	YI	South Africa	ZK, ZL, ZM
Colombia	HK	Italy	I	New Zealand	ZS, ZT, ZU
Czechoslovakia	OK	Luxemburgh	LX		

FOREIGN AIR LINES

Pan-American World Airways—*New York-Boston-Gander-Shannon-London-Brussels-Istanbul-Damascus-Basra-Karachi - Delhi-Calcutta - Bangkok-Hongkong-Manila-Okinawa-Tokio-Guam-Wake Island-Midway Island-Honolulu-Los Angeles-San Francisco-Seattle-Portland.*

Orient Airways—*Dacca-Delhi-Karachi; Calcutta-Chittagong-Rangoon; Calcutta-Chittagong-Dacca; Calcutta-Dacca; Calcutta-Chittagong-Akyab; Akyab-Chittagong-Dacca-Chittagong-Calcutta.*

Air France—*Paris-Tunis-Cairo-Karachi-Calcutta-Saigon; Paris-Tunis-Cairo-Bahrein-Karachi-Calcutta-Hanoi-Saigon.*

K. L. M.—*Amstardam-Rome-Cairo-Damascus-Baghdad-Basra - Karachi-Delhi-Calcutta-Bangkok-Jakarta-Singapur-Batavia.*

Air Ceylon—*Colombo-Jaffna-Madras; Colombo-Jaffna-Tiruchirapalli; Colombo-Jaffna; Jaffna-Tiruchirapalli; Colombo-Bombay-Karachi-Cairo-Rome-London; Colombo-Tiruchrapalli-Bombay-Karachi.*

Philippine Air Lines—*Manila-London-Manila.*

Scandinavian Air Lines System—*Stockholm-Tokio.*

Trans-Continental & Western Air Inc.—*New York - Gander - Shannon-Paris-Zurich-Geneva-Rome-Athens-Cairo-Basra-Dhahroan-Bombay.*

B.O.A.C.—*London - Tripoli - Cairo-Basra - Karachi-Calcutta-Rangoon-Singapur-Batavia-Darwin-Cloncurry-Sydney; London-Rome-Cairo-Bahrein-Karachi-Delhi-Calcutta; London-Rome-Cairo-Karachi-Calcutta-Singapur-Jakarta-Darwin-Sydney; London - Tripoli-Cairo-Bahrein-Karachi-Delhi-Calcutta; London-Rome-Bahrein-Bombay-Colombo; Britain-Italy-Egypt-Iraq-Pakistan-India-Ceylon-Burma-Malaya-Hongkong-Japan.*

Quantas & B.O.A.C.—*Britain-Italy-Egypt-Persian Gulf-Pakistan-India-Burma-Siam-Malaya.*

Ethiopian Air Lines—*Nairobi-Addis Ababa-Aden-Karachi-Burma.*

Iranian Airways—*Teheran-Ispahan-Yazad-Karman - Zahedan - Karachi-Bombay.*

Qantas Empire Airways—*London-Rome-Cairo-Karachi - Calcutta - Singapore-Darwin-Sydney; London-Rome-Cairo-Karachi-Bombay-Colombo-Singapore-Darwin-Sydney.*

Siamese Airways—*Bangkok-Rangoon-Calcutta.*

Braathins S. A. F. E.—*Oslo-Stavanger-Amsterdam-Geneva-Rome-Athens-Cairo-Abadan-Karachi-Bombay-Calcutta-Bangkok-Hongkong.*

INDIAN EXTERNAL SERVICES

Bharat Airways—Calcutta-Bangkok, Calcutta-Chittagong.

Air India International—Calcutta - Bombay - Cairo-Rome-Geneva-Paris-London-India-East Africa-India.

SOME IMPORTANT DATES

1911—First Official Air Mail on 18th February 1911 flown from U.P. Exhibition grounds, Allahabad to Naini Junction by M. Picquet, a French aviator.

1911—First passenger in an aeroplane in India was Sir Sefton Branker.

1912—Jules Tyck and Baron de Carters gave India her first public flying demonstration at Calcutta (Christmas Eve).

1918—First flight from Egypt to India by Capt. Ross Smith.

1919—First Eng.-India flight by Sqdrn.-Leader McLaren & Lt. Haley.

1920—First Air-mail service was organised by Government of India and operated by R.A.F. between Karachi and Bombay *via* Rajkot.

1927—Imperial Airways sent first air-liner to India, January, 8.

1927—Civil Aviation Department formed in India.

1928—First Flying Club in India.

1929—First regular air-mail introduced between England and India.

1930—First pilot trained in India with Commercial 'B' License was Bhagat Lal.

1949—First class internal mails by air without a surcharge was introduced on April, 1949.

INDIAN PORTS

Indian Ports—India, for all her size and length of coast-line, has only five developed major ports, Bombay, Cochin, Vizag, Madras and Calcutta. The first three provide natural harbours. Madras has an artificial one barely protected from weather particularly during October and November when cyclones prevail. Calcutta lies at the head of a 120-mile-long turbulent river which has a wide range of tides to which deep-drafted ships have to suit themselves. A sixth, Kandla in Cutch, is still in the process of being developed. Hitherto the administration of these ports has been vested in authorities set up under separate Acts. Bombay, Calcutta and Madras are administered by Port Trust which are semi-public statutory authorities, Cochin is directly administered by the Government of India, while Vizag is a port run by the Railway Board. An ambitious scheme coming within the framework of the forty-crore ten-year Port Development Plan of the Transport Ministry seeks to develop these ports and provide for general expansion, modern mechanical methods of off-loading, installations for carrying out ship-repairs and dry and wet docks. The success of such an expansion would naturally presuppose a unified administration which could, among other things, pool resources, technique, information, technical personnel and equipment. A Bill has been passed to amend Port Trust Acts of Bombay, Madras and Calcutta, is a welcome measure. It should be a prelude to further legislation which would include Cochin, Kandla and Vizag and finally bring under one comprehensive Act all ports including, 226 odd minor ports, now administered by State Governments.

Besides her major ports, India has over 226 minor ports spread over her long coast line serving Arabian Sea and the Bay of Bengal. Only half of the number are in good condition and large majority of these are roadsteads. All these ports are subject to the administrative control of the State governments. Under the Constitution Act, the subject "minor ports" figures in the concurrent list, but unless Parliament by law makes any change, the State Governments will continue to be entrusted with the executive responsibility for running these ports.

Minor Ports—The minor ports of India number 226 and they dot our Indian coasts from Lakhpat in the Rann of Cutch to Chandbali in the Bay of Bengal. They vary greatly in their capacity to handle trade as well as in their size and other physical features. Facilities provided at some of them vary from nothing at some open roadsteads to five elaborate harbours in Saurashtra with dredging equipment; while some handle only a few hundred tons per year, there are others through which as much as five lakh tons pass. They range in income also, from a few hundred rupees to six or seven lakhs a year. The Report of the Special Officer appointed by the Government of India in 1951 is as follows:—(1) unified action and a uniform policy which was not possible in the old set up, (2) proper dredging of entrances and approaches to ports, (3) use of small-sized steam ship on the coastal trade, (4) a hydrographic survey of ports, gulfs, creeks and river mouths with particular reference to exploring and expanding navigation on inland waters and (5) creation of Central Port Organisation with a view to maintaining coordination and port technical advice. The report envisages an expenditure of Rs. 2·5 crores to effect these recommendations.

Port Trusts—The ports of Calcutta, Bombay, Madras and Visakhapatnam are for administrative purposes placed under the control of bodies styled Port Trusts Boards. The Port Trust Boards of Bombay, Calcutta and Madras were reconstituted on April, 1949 in accordance with the provisions of Bombay, Calcutta and Madras Port Trusts (Constitutional Amendment) Act 1948. The reconstituted boards now have more Indian representatives of Indian commercial interests. From April 11, 1950 the Government of Travancore-Cochin ceased to have any vested interest in the administration of the Port of Cochin.

National Harbour Board—The Government of India have announced the formation of a National Harbour Board in 1950, to consider and advice the Government on important problems relating to the administration and development of ports and harbours in the country. The Board will, for the present, be composed of representatives of the ministries concerned of the Government of India, State Governments and of the major port authorities and will have as its chairman the Minister for Transport and Railways. There will be 18 members on the Board. The National Harbour Board will constitute the principal forum for discussing common problems relating to ports in their specialised aspects such as the need for technical personnel and equipment, the pooling of technical knowledge, the method of control and administration, laws relating to ports and their financial position etc. The Board will also pay due regard to the effects of changes in port policy generally in industry, trade and railways.

Government's Plan for the Development of Ports—The highlights of this programme are: (1) the extension of the major ports of Bombay, Calcutta, Madras and Cochin; (2) expansion of the ship-building yards at Visakhapatnam and construction of new ones at Bombay, Calcutta and Cochin; (3) establishment of shipping corporations for handling India's coastal and overseas trade; (4) development of new ports to serve ocean-going liners; and (5) establishment of naval bases at strategic points on the coast and on the island possessions around India.

Top priority is given by the Indian Government to the Rs. 250,000,000 project for the expansion and modernisation of the major ports.

Indian ports to-day handle about 20,000,000 tons of cargo annually. The projects now under way will increase their capacity to 26,000,000 tons. The ports, which are administered by semi-autonomous trusts, fetch an annual revenue of nearly Rs. 150,000,000. India's major ports handle an average of 7,000 ships, coastal and ocean-going, every year.

The Rs. 25,000,000 shipbuilding yard at Visakhapatnam will be the main Indian shipbuilding centre.

The Government propose to construct a dry dock for ocean-going liners besides expansion of existing building facilities and improvements to the Port of Visakhapatnam.

Visakhapatnam and Cochin will be India's major naval centres. Bombay will continue to be the operational head quarters of the Indian Navy, while naval stations at Madras and Calcutta will be expanded in the next few years. Bombay's shipbuilding yard is proposed to be located at Bombay, about 18 miles north-east of the port.

Indian Government is also planning the conversion into modern ports of some of the numerous minor trade centres littered all along the country's 3,200 mile coast line.

DESCRIPTION OF PORTS

Kandla—With the loss of Karachi after partition, there is no big port along 1,000 mile-long coast line between Bombay and Karachi to serve vast interland. So Kandla has been selected for a major port on the west coast of India on the coastline of Kathiawar and Cutch. Kandla creek situated at the eastern end of the Gulf of Cutch has a natural sheltered harbour and is easily navigable. It has maintained a depth of water over 30 feet since 1851. The geographical position of Kandla is best suited to replace Karachi in its service to hinterland. Delhi is 656 miles from Kandla as against 783 mile from Karachi. The Kandla project is under the immediate control of a high-power organisation under a development commissioner. The ministry of Railways has taken up the construction of a metre gauge link connecting Kandla with Deesa on the Palanpur-Deesa M. G. Branch line on the B. B. C. I. Ry. and Deesa with Raniwara on the Samdari-Raniwara M. G. lines of the Jodhpur Ry.

Bombay—Bombay is the natural outlet for India's trade with the west. It is strategically situated in the middle of the west coast of the country, this enabling it draw up a vast hinterland extending beyond the uplands of the Deccan to the fertile Indo-Gangetic plain and it is close to Aden and the Suez Canal as any other west coast port. The affairs of the port are under the supervision and control of the Bombay Port Trust, consisting of a Chairman appointed by Government and twenty-one members elected and nominated. The harbour, which is one of the safest and the most spacious in the world, covers 75 square miles and provides secure and ample shelter for shipping at all seasons of the year, being 14 miles long, 4 to 6 miles wide with a general depth varying from 22 to 40 feet. There are three enclosed wet docks and two dry docks. Besides the enclosed docks there are situated along the harbour front a number of 'Bunders' or open wharves and basins where the traffic carried by coasting and country craft and "overside" cargo from the docks and stream is handled. Seeds, hides and skin, cotton, oil cakes, piecegoods, food grains, turmeric, ores, tobacco are chief exports.

Madras—was an open roadstead with surf-beaten coast line, but the present harbour has been formed by two concrete walls projecting into the sea so as to enclose a space of about 200 acres with an entrance from north-east within which as many as 14 vessels drawing up to 31″—6″ can be accommodated.

Most important problem for Madras Port Trust is the sand movement which is shoaling up the entrance of the Harbour. The extension of existing sand screen by 300 feet has been undertaken to avoid this shoaling.

The chief imports into Madras are rice, and food grains, coals, oils, manures, papers and stationery, timber, sugar, dyeing and tanning substances, metals, glass and glassware, chemicals, hardware, machinery, motor vehicles, cycles and accessories, cotton manufactures, provisions, railway plant and rolling stock, etc.

Cocanada—About 80 miles South of Visakhapatnam. Principal exports consist of raw cotton, groundnuts, castor seeds.

Calcutta—is situated in latitude 22°33'N longitude 38°21'E on the river Hooghly. It is about 80 miles from the sea and is the largest port on the eastern side of India. The principal feature of the port is the difficulty of its approaches. The Hooghly with its winding course, many shoals and strong currents cannot be regarded as a natural waterway for ships of the size now trading to the port. The river Hooghly is notorious for its "traps and treacheries". There are as many as ten major bars between Calcutta and the sea. During certain months, the freshlet discharges coming down from the Ganges through the feeder rivers are heavily charged with salt and it has been computed that every cubic foot of water carries 1·1 cubic inches of solid matter and that some 60 million cubic yards of alluvium are carried past Calcutta annually. It is this alluvium which is the cause of the Shoals so troublesome to navigation. In order to keep the upper reaches open to navigation, dredging has constantly to be undertaken. To carry these operations (some 60 m. to 70 m. cubic yards are dredged annually at a total cost of some Rs. 40 lakhs) the commissioners of the port maintain a fleet of dredgers. Calcutta's shipping is at the mercy of the tides. The ships can enter and clear only at a fixed hour corresponding with the tides. The pilotage on the Hooghly, one of the most difficult waterways in the world was under the direct administrative control of the Government of India till May 16, 1948 when it was handed over to the Calcutta Port Commissioners for administrative reasons. The port serves the great jute, tea and coal industries, the wheat and seeds traffic of Bihar and the United Provinces and generally the agricultural areas tapped by the main lines of East Indian, Bengal, Nagpur and E. B. and Assam Railways and by numerous waterways connecting the delta with the interior of Bengal and Assam. Through Calcutta passes roughly one-half of the total sea-borne traffic of India.

The advantage of Calcutta as a port is as follows:—

(1) Calcutta is at the head of Indo-Gangetic basin which is the most densely populated area in India.

(2) It has in its hinterland jute factories, coal mines, iron mines, petroleum mines, mica mines, manganese mines, tea estates which find their foreign markets through Calcutta.

(3) Iron-melting industry which produces pig iron is also established in the hinterland of Calcutta.

Cochin—is a major port on the Malabar coast of India, 580 miles from Bombay. It is a port with 120 square miles of sheltered back waters hidden behind the narrow opening to the sea. It is the most important port between Bombay and Colombo. The system of backwaters running parallel with the coast affords cheap transport and excellent water-ways connecting several places of importance in the Cochin and Travancore States. At present there are 9 large and 2 small berths in the harbour for mooring steamers.

Tuticorin—This port is open all the year round and has next to Madras and Cochin the largest trade in southern India. The harbour is so shallow that steamers anchor about 5 miles from the shore and continuous dredging is necessary to keep the channel open between the sea and roadstead. A Port Trust was formed in 1924. There is a considerable trade with Ceylon in rice, pulses, onions, chillies and livestock.

Vizagapatam—is on the eastern seaboard of India and almost midway along the thousand-mile length of coast between Calcutta and Madras.

It is the only land-locked or protected port in the country. This also happens to be the only port administered by Railway in India. Owing to a hill-range bordering the sea, harbour remains concealed from the vessels plying on the ocean outside. This fact added much to its strategic importance. In October 1933, the port was opened to ocean-going ships. The principal articles of export from the port are manganese ore, bunker coal, tobacco, myrabalam and oilseeds. Food grains constitute at present the principal item of import, while general merchandise, machinery, petroleum and petroleum products are other prospective import items.

The port is controlled by the Government of India, ministry of Railways (Railway Board) through general manager, B. N. Ry., Calcutta.

It is now the centre of ship-building industry in India where Scindia Steamship Company have established ship-building yards. Foreign imports are directly received from foreign ports. It is a natural harbour. The ship-yard can build ocean-going vessels with a maximum length of 550 ft. and a maximum carrying capacity of 12,000 tons cargo.

Mormugao—is on the Konkan coast, south of Bombay and situated on the eastern extremity of Mormugao Peninsula in Portuguese India about five miles south of Panjim or Nova Goa, the capital. Its principal exports are manganese, groundnuts, cotton, cocoanuts, etc.

Bedi—Principal port in the State of Nawanagar is, Bedi Bandar, situated a few miles from the city of Jamnagar, at the head of a tidal creek some eight miles long, near the mouth of which is the roadstead called Rozi in which ocean going vessels lie at anchor.

Oka—is situated in a detached portion of Baroda far distant from Gaekwar's main territories in Gujarat. It lies in a strategic position at the extreme north-east point of the Kathiawar peninsula readily accessible to all steamers tiding along that coast. The port is available even to large ships at all states of trades and at all seasons of the year.

Bhavnagar—Half way up the Gulf of Cambay on its western side lie the port and town of Bhavnagar. Bhavnagar is situated on a creek several miles from the open waters of the Gulf.

Surat—situated 14 miles from the sea with which it is connected by a river navigable only by small country craft, Surat was one of the earliest and most important of the East India Company's factories. But the trade of Surat has considerably declined due to the rise of Bombay ports.

Mangalore—is a tidal port served chiefly by backwater communication with hinterland. The backwater of Mangalore is 3½ miles long and 2,000 ft. wide. The hinterland of Mangalore consists of South Canara, Coorg, and the Malnad districts of Mysore State. Mangalore is the north-western terminus of S. I. Ry. The chief exports to Europe are pepper, tea, cashew kernels, coffee, sandalwood from Mysore, rice, salt fish, dried fruits, fish manures.

Calicut—is the capital of the Malabar district and is some 42 miles from Tellicherry and 90 miles from Cochin. The port is practically closed during the south-west monsoon from the end of May until the latter half of August. The principal exports are coir, coir fibre, copra, coffee, tea, pepper, ginger, rubber, groundnut, raw cotton and fish manure.

Alleppey—is the premier port and commercial centre in Travancore and is situated about 35 miles south of Cochin. A canal connects the port with the interior backwaters. It possesses a roadstead affording safe anchorage during the greater part of the year. The chief exports are: copra, coconuts, coir fibre and matting, cardamoms, ginger and pepper.

Quilon—is the Coilun of Marco Polo. It is connected with Alleppey by backwater. The chief industries are cotton spinning and file manufacture.

Dhanushkadi—is the terminus of S. I. Ry. on the south-eastern extremity of the Island of Rameswaram at the junction of Palk Strait with the Gulf of Mannar and connected with Talaimannar in Ceylon.

Negapatam—is the chief port in the Tanjore District about 13 miles south of Karikal. Numerous sailing craft trade between this port and Ceylon.

Karikal—is a French settlement covering an area of 53 square miles and a sea board of 12 miles and is almost surrounded by Tanjore district. The chief traffic is rice, betelnuts, matches, fireworks and kerosene oil.

Pondicherry—is the capital of the French settlements in India, is situated on the Coromandel Coast, 104 miles south of Madras. The roadstead possesses a good anchorage. Pondicherry is the centre of the export trade in groundnuts from French Territory and adjoining Indian districts to Marseilles.

Bhatkal—is ideally situated to meet the needs of Mysore. A number of important industries are located in this area which is known as Nalnad area.

Malpe—is situated midway between the ports of Goa and Cochin, is the largest fishing centre of the west coast of India. There is a large tract of waste land nearby suitable for establishing naval and shipbuilding yards. A long chain of islands known as Mary's Isles 1½ miles in length running parallel to the coast, can serve as a seawall. The port has a natural harbour, free of rocks, sand-drifts and dangerous currents and is protected by nature against storms.

Total Exports

(In crores of Rupees)

	1948-49	1949-50	1950-51
West Bengal	267·69	255·85	263·83
Saurashtra, Okha and Kutch	0·02*	6·54	5·83
Bombay	77·08	108·61	182·67
Madras	78·50	106·63	126·38
	423·31	485·20	486·88

* Relates to Kutch only.

Imports of Merchandise

(In crores of Rupees)

	1948-49	1949-50	1950-51
Bombay	301·75	313·99	324·56
West Bengal	156·82	140·77	136·26
Madras	83·87	91·48	98·19
Saurashtra, Okha and Kutch	0·47*	12·80	5·85
	542·92	560·51	565·46

INDIAN SHIPPING

Position of Indian Shipping—Regions of India, Burma and Ceylon though containing over 18 p.c. of the population of the world, account only for a little over 3 p.c. of the trade, while Europe with a population barely fifth of the world provides more than half of the trade of the world. The U.S.A. with a population one third of Indian region has a trade four times as large as that of India.

Although geographical positions of the different countries and their agricultural potentialities have a bearing on the foreign trade of the countries concerned, it is industrialisation that is the deciding factor which determines a country's share in the world trade.

Fortunately, India possesses an abundance of raw materials for her industry; and the industrialisation in the post-war era is progressing rapidly, and her export trade is expanding. Judging from the available export-import figures and from the ever-increasing demand for capital goods from abroad and other countries' demands from India of her specialised products and raw materials, the export-import position of India to-day is such as to enable her to occupy an important place in oceanic shipping.

Geographically, the central position occupied by the Indian Ocean in the oceanic regions of the world, with Pacific and Atlantic flanking on either side, and with the North covered by the continental mass of Eurasia, gives India an enviably commanding position in the ocean trade routes of the world, and enables her advantageously to develop her maritime trade and shipping on an unprecendented scale.

Growing Tonnage—Inspite of numerous drawbacks and fundamental defects in the shipping position of India, such as shortage of tonnage and shortage of trained man-power, India acquired a tonnage of 150,000 without any help from the Government of India at the beginning of the second World War. Soon after the end of the war, the Government appointed a Policy Committee to assess our post-war shipping needs. This Committee reported that "the acquisition of an adequate share in the world's carrying trade should be the aim of our post-war shipping policy." Later a Sub-Committee appointed to work out the details recommended that India needed two million gross tons of shipping exclusive of country craft and that a hundred per cent of the purely coastal trade of India, 75 per cent of India's trade with Burma and Ceylon and other neighbouring countries, 50 per cent of India's distant trades and 30 per cent of the trade formerly carried in the Axis vessels in the Orient should be reserved for Indian Shipping. The Government of India accepted these recommendations in principle and endorsed the view that a "dynamic policy" must be adopted. Nothing of importance was however done by the Government till 1947 when at a conference Mr. C. H. Bhaba, the then Commerce Minister announced that as an interim measure government proposed to evolve a new type of shipping organisation by setting up two or three shipping corporations in each of which government would contribute not less than 51 per cent of total capital, the balance being subscribed either wholly by a shipping company or a number of shipping companies or partly by such companies and the public. Only one such corporation has been set up so far, its structure being somewhat different from Mr. Bhaba's original scheme, government contributing 76 per cent of the capital and the Scindia Company finding the remainder.

But the target of two million tons is still far off. To-day in 1951 we have a fleet of 95 vessels with an average tonnage of 3,77,500 tons with the prospect of the addition of 14,000 tons. At the end of 1949 there were 16 companies with an aggregate tonnage of 343,000 tons.

Shipping Control Department—Directorate General of Shipping has been set up in Bombay in 1949. It is the central body of the Government of India controlling the whole problem of shipping in the country. Semi-government shipping corporations, maritime conventions, seamen's welfare, nautical surveys, licences for deep sea navigation and light houses will be among the several maritime subjects which will be dealt with by the organisation. The three principal officers of the Mercantile Marine Department at Bombay, Calcutta and Madras will function under the jurisdiction of the Director-General. The function of the Director-General includes the implementation of the Government's policies with regard to the development of India's merchant navy and the co-ordination of the activities of various ports.

Categories of India's Maritime Trade—India's maritime trade to-day may be summarised in the following categories:

Pure coastal trade, originating and|or terminating at ports on the coast of the Union of India and the *non-coastal trade i.e.*, the balance of the maritime trade with other countries of the world which would be styled as overseas trade. This latter may further be divided into: (1) Indian Ocean Trade; (2) Atlantic Ocean Trade; (3) Atlantic or Pacific Ocean Trade. The first of these may be further divided into Western *i.e.*, comprising South and East Africa, Red Sea and Persian Gulf, and Eastern including Burma, Ceylon, Malaya, China, Japan, Australia.

Country Craft—The importance of country craft in the economies of India's water transport cannot be ignored. The sailing vessel, though small in size, carries the bulk of the cargo between neighbouring ports at a relatively cheap cost and plays a vital part in serving as a feeder to industry. The Sailing Vessels Committee appointed in 1948-49 to enquire in the conditions of this industry has submitted recommendations for the rehabilitation of this industry.

Measure to develop Overseas Shipping—The Government of India have been helping Indian Shipping Companies to become full members of the Shipping Conferences controlling the India-U.K. Continent, India-North America, India-Australia nd India-Malaya trades. In order to facilitate the entry of Indian shipping into all important overseas trades and to assist in solving the difficulty experienced by Indian shipping companies by raising the necessary capital, the Government have announced their scheme for the setting up of Shipping Corporations on a state-cum-private ownership basis. The first Shipping Corporation was registered in March, 1950 with an initial capital of Rs. 20 million. Necessary assistance was also given to Indian shipping companies for acquisition of additional tonnage by furnishing information regarding availabilities and arranging liberal release of foreign exchange. Government are also using their good offices to ensure that Indian companies operating in the overseas trades got their fair share of cargoes.

The Indian shipping companies, namely, Scindias and India Steamship Company apart from Eastern Shipping Corporation are at present operating in the overseas trade with a total of about 176.000 gross registered tons of shipping. Scindia S. N. Co., Bombay and India Steamship Co., Calcutta are operating in India-U.K.-Continent trades and the former also in the India-North America trade. Eastern Shipping Corporation is operating in the India-Australia and India-Malaya trades.

India and the Conference Lines—(1) When after Indian independence, India entered into overseas trade, few people know the struggle which Indian companies had to encounter in order to get their legitimate share in India's trade. A layman would perhaps feel that a shipping company is at liberty to ply its ships wherever it chooses. But its practice, it is not so. There are *Shipping Conferences* for different trades to which Indian shipping companies must be full members before they can participate in the foreign trade. These Conferences are exclusive foreign bodies which would not allow an outsider to come in and have the due share in the trade. But after prolonged struggle the Indian companies have been admitted into Conferences whereby they are enabled to operate on the trade freely with due regard to rules, regulations, restrictions etc. These Conference Lines cover trade between (1) India and U.K., (2) India and U.S.A. and North Atlantic Ports, (3) India and Australia, (4) Calcutta and the Continent.

Besides these four principal overseas conferences, (1) there is a shipping conference for trades between India and Far East and Japan. An institution which is not a full-fledged conference is called *Rate Agreement*. Rate Agreement exists for the trade between Calcutta and Port Said, Eastern Mediterranean and North African Ports whereby parties to the Agreement agree to quote same rates and follow uniform shipping practices.

(2) *Indian Coastal Conference*—came into existence in the beginning of 1951 which consists of 13 Indian companies who are full members and two British Companies who are associate members (B. I. S. N. and the Asiatic Steam) without any voting rights for the coastal trade of India.

(3) *New Conference*—In 1951, the following four Conference have also come into existence with a view to covering the trades with Burma, Ceylon and Pakistan—(*a*) Pakistan|India|Burma-Ceylon Conference, (*b*) India| Burma Conference, (*c*) Burma|India Conference, (*d*) Burma|Ceylon Conference.

Training Facilities—To train up Indian boys as officers for the merchant Navy of India, facilities are provided by the Indian Merchant Marine Training ship *Dufferin*, in the Bombay Harbour. On this ship, cadets are every year admitted for deck officers' (Executives) training. On the recommendation of Merchant Navy Training Committee set up in 1947 the Government established a Post-Sea Nautical and Engineering College at Bombay on October 1, 1948. The institution provides short but extensive training for sea-going Masters, Mates, Second Mates, First Class Engineers and Second Class Engineers and Home Trade Masters and Mates. The Government have also set up a Directorate of Marine Engineering Training to select Engineer apprentices annually and put them through the full training in Marine Engineering. After this training they will receive one year's instructions at a Marine Engineering College which is being started in Calcutta. There is recently established a Dockyard Apprentice School inside the Dockyard at Bombay for Marine Engineering, Electrical Engineering, Naval Architecture Training etc. For the training of Indian boys to marine jobs, West Bengal Government have opened in 1949 a training school under Calcutta Port Commissioners. From the middle of 1950, Government of India have taken over *Lady Fraser* and *Andrews* from Calcutta Port Commissioners, to convert them as training vessels for marine crew of engineering branches.

Indian Merchant Navy Flag—Ships registered in India has been flying since January 26, 1950, a new merchant navy flag. The flag of a width two-thirds of its length, will be red in colour with the National Flag of India super-imposed in the left-hand quarter.

Progress of the Indian Shipping—Even though total reservation of coastal shipping for Indian ships, as per the announcement made by the Government of India in 1950, was not achieved during the stipulated period ending August 1951 due to world shipping shortage, it is pointed out that Indianisation of coastal shipping became virtually a *fait accompli* in the course of the first five months of 1951, and only a negligible proportion of foreign shipping is now plying on the Indian coast.

The Indian tonnage position has gradually but steadily improved since 1948 when the Government of India brought coastal shipping under control and introduced a licensing procedure. In 1948 the total Indian tonnage plying was about 150,000 tons or 53 per cent of the total tonnage operating on the coast. In 1949 it was 192,000 tons or 62 per cent of the total, in 1950, 200,000 tons or 82 per cent and at the end of May of 1951, 209,101 tons or 94 per cent of the total.

The total amount of cargo carried on the Indian coast by ships amounts to about 3 lakhs tons, of which approximately half is coal for the railways and the industries and rest food, salt and other commodities. The Government of India, it is learnt, have taken steps to ensure the carriage of a definite percentage of cargo by Indian ships on the overseas routes, for example, about 50 per cent on the Burma-Ceyon-Malaya run and about 40 per cent on the India-Australia run. Much has been achieved, it is stated, in the way of rationalisation of the freight structure since the recent formation of the Coastal Conference and the coastal rates, though enhanced by about 15 per cent recently, are much lower than the overseas rates.

On the overseas trade three Indian companies are at present engaged. These are the Scindia Steam Navigation Company with eight ships on the India-U.K. run and six on the India-U.S.A. run; the Indian Steamship Company with eight ships on the India-U.K. run. The first government-sponsored shipping corporation, known as *Eastern Shipping Corporation* was registered on March 24, 1950 whose managing agents are Scindia Steam Navigation Co. Ltd. The Corporation is at present operating with two owned cargo ships in India/Australia trade and with one chartered cargo-cum-passenger vessel in the Malaya/India trade.

TONNAGE OF VESSELS ENTERED AND CLEARED FROM ALL INDIAN PORTS WITH CARGO

	Indian		*British*		*Foreign Countries*	
	entered	*cleared*	*entered*	*cleared*	*entered*	*cleared*
1950-51 ..	472,389	640,158	4,752,628	4,301,335	8,622,359	7,714,433
1949-50 ..	238,808	337,750	5,168,948	3,964,505	8,327,784	6,694,719
1948 49 ..	178,640	205,088	5,148,797	4,253,371	..	..

IMPORTANT DATES

1919—Scindia Company first launches its first steamer on high water.

1941—Dr. Rajendra Prasad lays foundation stone of Indian ship yard at Vizagapatam, June, 1941.

1948—Pt. Jawaharlal Nehru launches for the first time Indian-made and Indian-financed s.s. *Jalausha* at Vizagapatam, March, 14.

INDIAN AGRICULTURE

Importance of Agriculture in India—Agriculture always plays an important part in the economic life of India. More than two-thirds of our people live on the land. It is the premier source of national wealth. It provides the bulk of India's exports. Some of the biggest industries, such as sugar and textiles depend on agriculture for raw materials. Increase of population having outstripped food production, food was already in deficit when independence came.

Position in Agriculture—The world position of Indian agriculture is indeed a big one. In rice, for example, which is by far the most important crop in this country, India is second only to China. So too in tea. In sugarcane, however, India leads in acreage. India also leads in groundnut production, and is second in linseed. Among commercial fibre crops, India is only second to the U.S.A. in cotton and to Pakistan in jute. Lac is a virtual monopoly of India. Although it is no small matter to hold such a position, neither is it strange seeing that agriculture is the basic industry of India no less than three-fourths of the population of the country being either directly engaged in it or dependent upon it.

Defects of Indian Agriculture and Shortage of Food—Indeed the defects of Indian agriculture become evident when the per acre yield of most crops in India is compared to that of foreign countries. India gets 660 lbs. of wheat from an acre of land while Egypt obtains 1,918 lbs., Japan 1,713 lbs. and China 898 lbs. The average yield of sugarcane in India is only about one-fourth of Java's. This bespeaks the backwardness of Indian agriculture which by the way is due no less to the growing lack of soil fertility as to the medieval technique of agriculture and an almost complete lack of capital to be employed in it. Fragmentation of land, the age old Zemindary system are also courses which have retraded the progress of Indian agriculture.

Effect of Partition—In food as well as in some other agricultural products India has been adversely affected by the partition of the country. With about 77·7% of the population of undivided India, the Indian Union has been left with 73·1% of the total area, 72·5½% of the rice acreage, 70% of the wheat acreage and 70% of the total irrigated area. In the matter of irrigation specially it is noticeable that the most important irrigation works are located in Sind and West Punjab of West Pakistan. Besides a large part of the area under the improved varieties of cotton and wheat are left in the same area. On the other hand although the Indian Union has a larger per capita acreage under food crops than Pakistan, India is a deficit country in food grains by more than 2 million tons while Pakistan will have a surplus normal years.

Government Departments and Agricultural Research—The Central Secretariat of Agriculture with its agencies in the States was started first in 1894 as a result of the recommendation of the Famine Commission of 1880. But their only function was at that time to collect agricultural information and statistics and not to conduct scientific research and enquiries. The first serious attempt to introduce scientific approach to Indian agriculture was made in 1889, when the Secretary of State for India deputed Dr. Voelker, the then consulting chemist to the Royal Society of Agriculture in England to come to India and advise on the application of chemistry to Indian agriculture on its general improvement. His report published in 1891 constitutes an important landmark in the history of the development of State policy on agriculture. The second landmark was laid in 1905 when the initiative of Lord Curzon led to the foundation of the

Imperial Agricultural Research Institute at Pusa and the establishment of the All-India Board of Agriculture with the object of bringing the Provincial Agricultural Departments into closer touch with each other.

With the introduction of the Morley-Minto Reforms in 1920 and the transference of "Agriculture" to provincial control, the absence of a central machinery having both power and ability to guide, co-ordinate and further stimulate research in the provinces was keenly felt. The Royal Commission of Agriculture in its report of 1926 drew a fresh recognition to the fact that "an organisation for agricultural progress not based on research is merely a house built on sand". The Commission therefore emphasised the supreme need of continuous research and elaborated an all-India machinery for its co-ordination. Accordingly the present *Indian Council of Agricultural Research* was formed in 1929. Its Advisory Board consists of experts representing the Provinces, States, Universities and other scientific bodies while the Governing Body is composed of the Provincial and State Ministers of Agriculture, representatives of the Central Legislature and the commercial and trade interests. The governing body of the Council is assisted by a Board of Research and a Board of Extension and has a Standing Committee. This Council coordinates research done at different centres in the country, takes initiative in suggesting suitable lines of work and undertakes schemes on its own. Several crop research institutes are working under the Council in different parts of the country.

Another important development resulting from the Agricultural Commission's recommendations was the establishment of the *Central Agricultural Marketing Department* in 1935 with the object of (1) grading and standardisation of agricultural products, (2) establishment of regulated markets, (3) organisation of producers for bulking, pooling and disposing of produce and (4) bringing about improvement in rural communications and provision of subsidiary roads. For the carrying out of its main purpose the Agricultural Produce (Grading and Marketing) Act of 1837 was passed and the graded produce are given the seal AGMARK". The Department has also carried out marketing surveys and brought out reports on the marketing situation and practices of a large number of agricultural, poultry and husbandry produce. In occordance with the recommendations of the Agricultural Commission and the Indian Cenral Banking Enquiry Committee and later according to the draft bill forwarded by he Marketing Department, the various Provincial Governments have passed laws establishing regulated markets in their respective areas.

Besides these, the Central Government have also established several *Indian Central Committees* such as *Indian Central Jute Committee, Indian Central Cotton Committee* to assist in the development and improvement of production and marketing.

The Central Ministry of Food and Agriculture now co-ordinates through periodical conferences and deals with all-India agricultural problems and planning. For this purpose it maintains among others the following institutions: (1) *Indian Agricultural Research Institute* which evolves new varieties of foodgrain, collects insects and fungi, evolves new method of crop protection and generally investigates agricultural problems of national importance, (2) *Indian Veterinary Institute at Izzatnagar and Mukteswar* carries on veterinary research. Vaccines prepared at the Institute have brought under control cattle and poultry diseases, (3) *Lac Research Institute, Ranchi,* (4) *Forest Research Institute, Dehra Dun,* (5) *Indian*

Institute of Sugar Technology, (6) *Indian Dairy Institute, Bangalore,* (7) *Cattle-breeding farm, Karnal,* (8) *Creamery at Anand,* (9) *Cattle-breeding Station, Coimbatore,* (1) *Central Rice Research Institute at Cuttack,* (11) *Central Potato Research Institute at Poona,* (12) *Central Vegetable Breeding Station at Kulu.* Then there are several Central Commodity Committees to deal with special problem of the commodities concerned. The entire research is co-ordinated by the Indian Council of Agricultural Research.

Zoological and Botanical Surveys—The Ministry of Agriculture is responsible for *Zoological Survey of India* which is mainly concerned with care, preservation and maintenance of natural zoological collections in its custody. *The Botanical Survey* of India at Calcutta is also under the Ministry of Agriculture.

Agricultural Education and Agricultural Service—In view of the importance and yet the backwardness of Indian agriculture, the growth of agricultural education in this country by the gradual establishment of Agricultural Colleges at Poona, Kanpur, Nagpur, Coimbatore, Allahabad and the introduction of the degree in agriculture in the various universities of the country may well seem to be slow and halting. But recent indications show that the provinces lacking such institutions as yet have become alive to their urgent necessity and are soon going to establish government institutions in their respective areas. The Government of India have also recently opened a Central College of Agriculture at Delhi.

In these circumstances, it is only natural to expect that although the Indian Agricultural Service came into being as early as 1906, the Indian Central Government has only 6 Agricultural Officers for every 10 million population whereas the U.S.A. has 68 times and the U.K. 20 times the number. This of course is in addition to the Provincial services, which also as yet do not account for much. But the expenditure on agriculture, both direct and indirect, seems to be increasing in all the provinces in the post-war years.

Agriculture in relation to Five Year Plan—The Planning Commission set up by the Cabinet has issued a draft outline of national development plan. The principal emphasis in the plan is on agriculture and irrigation. This is explained by the serious view which the Commission takes of the country's food problem.

The distribution of expenditure in the first part of the Five Year Plan for agriculture and rural development is as follows—

First Part of the National Plan 1951-52—1955-56

(Rs. Lakhs)

	Central Govt.	*Part A States*	*Part B States*	*Part C States*	*Total*
Agriculture & Rural Dev. ..	18,04	127,47	37,93	8,26	191,70

According to Commission's estimates, out of 7·2 million tons of additional production, 2·3 million may come from major irrigation projects, 1·9 million from minor irrigation scheme. 1·5 million from Land Improvement and Reclamation Schemes, 0·6 million from Manure and Fertilizer Schemes, 0·4 million from Seed Distribution Schemes and 0·5 million tons from other schemes. The achievements of these targets, it is pointed out, depends on two conditions, *viz.,* (1) That administrative arrangements for the implementation of the programme reaching down to the village, are made on a adequate sale and (2) that the price policy to be followed is consistant with the objectives of the programme.

For the attainment of the objectives of the plan, the commission considers an effective price policy to be an indispensable instrument. The first step in this direction is to prevent the prices of commercial crops like jute, cotton and oil seeds from rising further. Large disparities between the prices of competing crops will come in the way of fulfilment of the Plan. When price incentives are offered, it is likely that the farmer will respond to it. Such a policy is however, inconsistant with the expectation that production of different crops will reach defined level of production." It is therefore of the greatest importance to maintain appropriate structure of relative prices between main agricultural commodities.

Fertiliser Supply—It is well-known that although cow-dung, green manures, oil-cakes as well as a little amount of chemical fertilisers are used today as manure, lack of proper manuring is one of the main reasons of the low fertility and yield of Indian agriculture. This is due again no less to habit and lack of capital than to absence of sufficient supply of manure. To remove this short supply, the Government of India have recently started a Fertiliser Factory at Sindri (Bihar) for the production of 350,000 tons of ammonium sulphate per annum. Besides the various state governments have recently started a drive for increasing the production of compost manure.

Crop Seasons—There are two well-marked agricultural seasons in India. The one beginning with the commencement of monsoon and harvested in autumn is known as the *'kharif* crop'. The other crop sown in autumn and harvested in spring is known as the *'rabi* crop'. Only in South India the kharif and rabi crops have practically no distinction because of the absence of any marked distinction between the various seasons. The principal kharif crops are rice, jowar, bajra, maize, sugarcane, cotton, jute, tobacco, sesamum, groundnut, mung etc., the principal rabi crops being wheat, barley, gram, peas, linseed, mustard, rapeseed potatoes etc.

The double cropping systems differ according to climate and soil of the region and are as follows: rice followed by rice, rice followed by pulses, rice followed by wheat, rice followed by mustard or rape, jowar followed by wheat, mung or mattar followed by jowar, maize followed by guar and cotton intercropped with senji, methi or berseen.

Crop Rotation—Each crop removes from the soil one particular nutrient more than the rest. If the same crop is repeated the soil becomes deficient without nutrient. The soil will recuperate its fertility if another crop in grown which uses a different nutrient crop rotation and mixed cropping have been in vogue in India for a long time.

The usal crop rotations over two-year periods are in respect to some main crops (*a*) rice and pulses and (*b*) jowar or maize and wheat or gram. Three-year rotations are usually (*a*) wheat, maize and sugarcane, (*b*) sugarcane, wheat and cotton and (*c*) wheat, wheat and torrio.

Leading Crops of India—The crops of India are usually classified as follows:—(1) *Food crops* such as rice, wheat, barley, millets, pulses and gram, sugarcane and spices, (2) *Oilseeds* such as linseed, rape and mustard, sesamum, castor, groundnut and cocoanut; (3) *Fibres* such as cotton, jute, hemp and flax; and (4) *Drugs and Beverages,* such as poppy, cinchona, tobacco, tea and coffee.

FOOD CROPS

Rice—the staple food of the majority of the people, is the leading crop of India and occupies about 30 per cent of the total cultivated area. The rice acreage and yield of the Indian Union has in recent years fluctuated around 60 million acres and 20 million tons, which means a quarter of the world's rice is produced here. As sufficiently high temperature, high rainfall and fertile alluvial plains are necessary for the growth of the crop, the southern and north-eastern parts of India are the main regions of rice growing. In order of merit, Madras, Bihar, West Bengal, the U.P., the C.P., Orissa, Assam and Bombay are the main rice growing areas. Although it is generally regarded as a winter crop to be harvested in December and January, rice is special crop in the monsoon tracts. Two other varieties of comparatively small importance are the autumn rice harvested in September and the summer rice harvested in May and June.

Wheat—which is the staple food of central and north-western India is a *rabi* (spring) crop sown in India from October to December and harvested from March to May and stands next only to rice in importance. The U.P. and East Punjab form the principal wheat growing area. The two main species of what grown in India are the so-called 'bread' wheat of Europe and the so-called 'marconi' wheat and it is estimated that about a third of the total acreage of wheat in India is under improved varieties.

Barley—a subsidiary food to wheat-eaters is a *rabi* crop and is grown mainly in the U.P. and Bihar. Compared to her pre-war acreage and yield of about 6 million acres and about 1·9 million tons, India has now about 7 million acres under barley producing about 2·4 millon tons and has thus improved her pre-war world position when she accounted for about 6 per cent of the acreage and about 4 per cent of yield.

Millets—*viz., jowar* (called cholam in Madras) and *bajra*, the two main varieties grown in India constitute the staple food of the agricultural population of the south. As noticed above both of them are mainly grown as kharif crops. While jowar is mainly grown in Bombay, Hyderabad, the C.P., Madras, the U.P., bajra is grown mainly in the Rajasthan Union, Bombay, the U.P., Madras and East Punjab in order of importance. It is estimated that jowar is grown in about 20 million acres yielding about 4 million tons while bajra is grown in about 16 million acres yielding more than 2 million tons. Another such foodcrop, grown mainly in the south is *ragi* which accounts for about 5 million acres producing about 1·4 million tons annually. Another foodcrop, uncommonly rich in its food value, is *maize* (commonly known as makai or bhutta). Although grown more or less all over India, it is grown mainly in the U.P. and Bihar and accounts for about 7 million acres producing more than 2 million tons annually.

Gram and the Pulses—As is well-known, these constitute an important and balancing item of the popular diet in this country. Often grown mixed with other cereals, the pulses help to restore the fertility of the soil when grown as rotation crops. *Gram*, the most commonly grown pulse of India, is a rabi crop and accounts more or less for about 17 million acres and 3·5 million tons. The U.P., East Punjab, Bihar, the C.P. and Hyderabad are in order of merit the most important gram producing areas. Khesari, mung, masur, arhar, mattar and kalai are the other pulses, also grown extensively throughout the country.

Sugarcane—Though a kharif crop, it is grown mainly in the northern provinces of India, the U.P., Bihar and East Punjab being the leading producers. In recent years, the acreage under sugarcane in India has fluctuated around 3·6 million acres yielding in terms of raw sugar (gur) about 5 million tons. But the per acre yield is so low that with about 28 per cent of the world acreage under sugarcane India accounts for less than 5 per cent of the total annual yield of the world.

Spices—of numerous varieties are grown throughout India, some mainly in the south. Of the Indian spices *pepper* is confined to the submontane tracts of the western ghats and the total acreage is estimated to be over 20,000 acres producing about 22,000 tons in a normally good year. The major share of the pepper is produced by a large number of small holdings, *chillies* in West Bengal, Madras, *Ginger* in Bombay, the U. P., West Bengal, Madras and Bombay *cardamom* in the forests of southern and western India, and *cinnamon* in the Western Ghats of South India. Among others *betelnuts* are grown mainly in West Bengal and South India, *arecanuts* being also grown in the same areas. India is however in short supply of many of the spices and has to import them.

Other Food Crops—Among *other food crops* mention must be made of the overall shortage of *fruits and vegetables* which keeps the first almost totally out of the reach of the general mass of people and due to which the later is an insufficient unit of popular food considering the dietary habits of the people. To make the position clear it may be mentioned that in potato for example India's production is so very low that the per capita consumption comes to about only 8 lbs. per annum as compared to 506 lbs. in Belgium. It is not strange therefore that fresh vegetables, not to speak of fruits, have annually to be imported in a mainly agricultural country.

PLANTATION CROPS

Tobacco—India stands third in the production of tobacco, the other countries being U. S. A. and China. There are five zones of concentrated production in India—(*a*) *North Bengal area,* major portion of which has gone over to Pakistan, (*b*) *North Bihar area,* growing both Nicotina Tobacum and Nicotina Rustica; the former used for chewing as well as manufacture of cigarettes and latter mostly used for hookah, (*c*) *Gujarat area* growing Nicotina Tobacum suited for bidi, hookah and snuff, (*d*) *Nepani areas* of Balgaum, Kolhapur and Miraj growing Nicotina Tobacum used for chewing and bidi; they are specially mild and sweet, (*e*) *Guntur area* growing virginia type tobacco which is excellent for cigarette manufacture. The chief virginia variety cultivated in Indian soil is Harrison special.

Poppy—which was an important narcotic crop before International Agreement led to the restriction of opium exports, is at present grown chiefly in Bihar, the U.P. and some central Indian states and that mainly as a government monopoly.

Cinchona—is mainly grown on government plantations in the Nilgiri Hills and Darjeeling. Considering the overall need of the malaria-stricken country-side, production is still short and has to be supplemented by imports.

Hemp—(ganja) grown under government licence, yields three distinct narcotics—bhang, charas and ganja. They are grown in Bihar and Madras mainly.

Tea—in whose acreage and yield India stands second in the world and which at present is one of India's main exportable commodities is grown in Assam, West Bengal, as also in South India and a little in East Punjab. Grown in about 730,000 acres producing more than 500 million lbs., and mainly in plantations on hill slopes of between 2,000 and 5,000 ft. above sea level, India is a producer chiefly of black tea only.

Coffee—next to tea, coffee is considered the most important plantation crops in India. The Indian production though small, has consisted always of a large proportion of highest quality and is grown in about 212,000 acres yielding about 18,000 tons in Mysore, Travancore, Cochin and Coorg mainly. The acreage under 'robusta' the better variety, is at present about 25 per cent of the total.

Rubber—The cultivation of raw rubber on a plantation scale was undertaken in Travancore-Cochin, Malabar, Coorg and Mysore in early years of the present century. The production of rubber in the country at the present time is of the order of 16,000 o 17,000 tons. Of the total number of rubber estates and holdings, 72·85 p.c. are located in Travancore, 8·19 p.c. in Cochin, 16·55 p.c. in Madras (mainly Malabar) and remaining 2·41 p.c. are in Coorg, the Andamans and Assam.

FIBRES

Cotton—the chief commercial crop of India, has fallen in acreage from about 21 million acres in the pre-war period to about 11 million acres at present, the yield coming down from about 4 million bales (of 400 lbs. each) to about 2·4 million bales against an internal requirement of about 4·2 million bales. Coming down thus from a surplus to a deficit country in respect of cotton, the partition of the country has left India with about 1·3 million bales only of long staple cotton against a requirement more or less of about 2 million bales for mill consumption. Although grown in most areas, in India, Bombay, Saurashtra, the M.P. and Hyderabad supply the major amount of it.

Jute—heretofore a monopoly of undivided India, is at present grown in about 766,000 acres yielding about 2 million bales against a total requirement of about 6 million bales. Endeavour is being made therefore to extend its cultivation from mainly West Bengal, Bihar, Orissa and Assam as at present to South Indian areas suitable by climate and soil for growing jute in them. Reclamation of fallow land, diversion of *aus* pady land, double cropping of *aman* paddy land are some of the measures adopted to secure an increase in jute production and the result has been the progressive increase of jute production in India.

Hemp—is another fibre grown in India chiefly in the M.P., the U.P., Bombay and West Bengal. Small as the production is, it is used largely for the production of coradge and canvas.

Silk—Two-thirds of the total output of this fibre comes from Mysore. Of the other varieties of silk, "mulbery" silk is grown in the districts of Murshidabad, Malda and Birbhum of West Bengal, Dehra Dun and Parbatgarh of the U.P., Gurudaspur of East Punjab and in Kashmir, where it is a state monopoly; 'tassar' silk in the M.P. and the Chotanagpur division of Bihar; 'eri' silk in the Jalpaiguri district of West Bengal and in Assam; and 'muga' silk in Assam and Manipur.

OILSEEDS

Linseed—a *rabi* crop, producing a very important industrial oil, is at present grown in about 3·3 million acres yielding more than 350,000 tons annually. Abundantly grown throughout northern India, the M.P., the

U.P., Bihar and Hyderabad it ranks respectively in importance as the main linseed producers.

Castorseed—another non-edible oilseed, is a virtual monopoly of India, the average acreage and yield in recent years being 1·4 million acres and about 130,000 tons. It is grown chiefly in Hyderabad, Madras the M.P. and Bombay.

Groundnut—The groundnut cultivation has become a major agricultural operation in India and the crop is now estimated to occupy nearly 42 p.c. of the area under all oilseeds and 4·4 p.c. of the total area sown under all main food crops in the Indian Union. From a mere 0·5 million acres at the beginning of the century, the groundnuts now account for nearly 10 m. acres with an annual yield of 3½ million tons of nuts in shells and 4·10 m. tons of kernels. Nearly 80 p.c. of the groundnut area is concentrated in Madras, Bombay and Hyderabad and the prominent varieties grown are the Coromandel and the Peanuts. Bold nuts grown in Saurashtra with a lower oil content are specially valued for eating.

The oil is used for culinary purposes either as such or in the form of the hydrogenated product known as vanaspati.

Rape and Mustard—two other very important edible oilseeds, are, unlike groundnut, rabi crops accounting for about 4·3 million acres and a little less than 800,000 tons in normal years. The U.P., Bihar and East Punjab produce the major portion of the total crop, although it is grown elsewhere in nothern India.

Sesamum—also an edible oilseed, is a kharif crop grown in a little less than 4 million acres with an yield of more than 340,000 tons in normal years. The chief growers of sesamum are the U.P., Hyderabad, Madras and M.P.

Cocoanut—an important oil-yielding tropical fruit, is produced extensively in the coastal provinces of India, but mainly in the South. India's average annual acreage and output of cocoanut is estimated at 1·5 million acres and 3,000 million nuts of which about 1,500 million are converted into copra. India's requirements are not however met wholly by the internal production, so that India has to import a large quantity of oil and copra.

Cotton-seed—also an edible oilseed, is naturally a by-product of cotton cultivation and is extensively grown in India, the average annual production being above 2 million tons.

AGRICULTURAL PRODUCTION OF INDIA

(*Reporting areas only*)
(*000 tons*)

	Rice	*Wheat*	*Jawar*	*Bajra*	*Maize*	*Ragi*	*Barley*	*Gram*
1944 ..	20,846	6,324	6,541	3,273	1,969	1,764	1,898	2,826
1945 ..	19,771	6,849	6,862	3,339	2,269	1,638	2,138	3,227
1946 ..	18,208	5,907	5,517	2,803	2,060	1,170	1,962	3,141
1947 ..	19,856	4,744	5,277	2,667	2,035	1,476	2,414	3,599
1948 ..	19,584	5,389	5,967	2,764	2,127	1,455	2,604	4,503
1949 ..	21,748	5,471	5,013	2,120	1,754	1,455	2,166	4,535
1950 ..	21,926	6,110	5,743	2,530	1,979	1,438	2,170	3,651

	Raw Sugar	*Tea**	*Coffee*		*Raw Sugar*	*Tea**	*Coffee*
1944 ..	5,094	4,75,638	16,881	1948 ..	5,817	5,75,866	15,612
1945 ..	4,740	4,91,613	17,720	1949 ..	4,869	5,85,390	15,584
1946 ..	4,552	5,34,848	20,527	1950 ..	4,938	..	17,238
1947 ..	4,913	5,61,740	18,150				

* *in lbs.* Source: *Report of the Currency & Finance 1950-51.*

INDUSTRIAL AGRICULTURAL PRODUCTION OF INDIA

	Sesamum (000 tons)	*Groundnut* (000 tons)	*Rape & mustard* (000 tons)	*Linseed* (000 tons)	*Castor seed* (000 tons)	*Total oil seeds* (000 tons)
1944	.. 411	3,823	692	365	140	5,431
1945	.. 353	3,856	828	380	131	5,448
1946	.. 354	3,466	719	351	123	5,013
1947	.. 323	3,588	792	328	117	5,148
1948	.. 351	3,411	806	431	118	5,117
1949	.. 335	2,901	735	423	108	4,502
1950	.. 431	3,379	793	411	128	5,142
1951	.. 421	3,331	826	398	106	5,069

	Cotton (000 bales)	*Jute* (000 bales)	*Lac* (000 cwt.)		*Cotton* (000 bales)	*Jute* (000 bales)	*Lac* (000 cwt.)
1944 ..	3,705	1,463	849	1948 ..	2,188	1,658	972
1945 ..	2,222	1,164	962	1949 ..	1,767	2,055	806
1946 ..	2,167	1,459	1,127	1950 ..	2,970	3,089	1,161
1947 ..	2,168	1,320	1,767	1951 ..	..	3,292	962

LIVESTOCK IN INDIA

Importance of Cattle in India.—Cattle plays an important role in the rural economy of India. In all agricultural operations oxen are indispensable to Indian farmers. The value of hides, bones, hoofs and horns is also of considerable economic importance. The contributions of cattle wealth to the economy of India is estimated to be Rs. 19,000 millions annually.

India is one of the largest livestock countries in the world, having 136 million cattle and 40 million buffaloes which together comprise about a quarter of the world's bovine population. In addition, India has 37·7 million sheep, 46·5 million goats and 3·2 million other animals consisting of horses, mules, donkeys and camels, all of which play a vital part in the agricultural economy of the country. Both per head of the human population and per acre of cultivated land, the number of livestock in India exceeds those in most other countries. It is however well known that they are in a very undeveloped state and that the per capita production is perhaps the lowest in the world.

Indian cattle serve two main purposes: one is the milk production and other is the supply of bullock power for agricultural operation like ploughing, carting, and drawing of water for irrigation. But Indian cattle is of inferior quality because there is indiscriminate breeding and a majority of them do not possess characteristics of any breed. The Agricultural Research Institute has recently undertaken to build up pedigree herds of Indian cattle. Moreover many young cows and young buffaloes are slaughtered when they go dry because of lucrative prices offered for them and for other economic reasons. The Agricultural Marketing Department has suggested that indiscriminate slaughter of such cattle should be prevented by legislation and that cattle salvage stations should be established in big towns throughout India to take in such cows and buffaloes when they have been rejected by city milkmen. In order to improve the breed of cattle, a *key village scheme* has been prepared. This scheme aims at the multiplication in villages of breeding bulls of the requisite type. The total expenditure of this scheme will be in the neighbourhood of Rs. 96,000,000. A beginning has been made with seven pilot key village stations in Uttar Pradesh, Travancore-Cochin, Delhi, Orissa, Bombay, Hyderabad and Saurashtra.

The most important cattle-rearing region is in the north-west. It is a belt of land extending from Kathiawar through Rajputana and the Punjab to Kashmir. The finest animal is bred in Gujerat. Other areas where cattle is reared are the Malwa plateau and the northern Madras. Sheep and goats are reared in largest numbers among the mountains of Kashmir and on the dry pastures of the Punjab and the Deccan Hills. Camels are also used in Rajputana, Sind and other places as beasts of burden. Elephants are also used for work in Assam. But the position of Indian cattle has not improved due to the following causes: (1) Refusal of orthodox Hindus to destroy old, diseased cows on religious grounds, (2) Lack of food, (3) Proper breeding, (4) Want of grazing lands, (5) Unscientific method of rearing animals and (6) Want of cross-breeding.

Species of Cattle—In India certain breeds of cattle are known for their high milk production while others for their high class bullocks. A third category of animals combine in themselves a moderate degree of efficiency for production of both milk and work. The following are the Indian breeds of cattle—

(1) *Gir*—the home of the breed is Kathiawar. These are good milkers; (2) *Hariana*—the home of the breed is the area covered by the districts of Rohtak, Hissar, Gurgaon and parts of Karnal and Delhi. A dual purpose animal, valued as a powerful work animal and at the same time capable of providing a fair amount of milk; (3) *Khillri*—is the well-known draught breed of the southern region of Bombay Presidency; (4) *Kanrej*—the home of the breed is particularly along the Benas and Saraswati rivers in the Rann of Cutch, Ahmedabad district and Radhanpur State (*i.e.*, Gujerat). It is one of the heaviest of the Indian cattle. This is a famous milker; (4) *Murrah*—the home of this breed is Hariana tract. Murrah buffalo cows are amongst the efficient milk and butter producers of India; (6 *Sahiwal*—this breed is mostly found in Ferozepur district and other border towns of East Punjab *e.g.*, Amritsar. (7) *Sindhi*—Sindhi cows are high milk yielders and the most economic milk producers. Substantial progress has been made to develop this breed in parts of Southern India, particularly in Travancore. It is distinctively a dairy animal; (8) *Tharparkar*—this breed has been recently developed in Karnal (East Punjab and Patna). The cow are good milkers. There is another category of cattle which do not conform to any well-defined breed characteristics. Over 60 p.c.

of the Indian cattle belong to this class. The policy followed in the development of this section, is to upgrade them into well-defined breeds by the use of typical bulls of a breed, that is found to thrive in respective areas.

It is a significant fact that good cattle are generally found in dry areas and inferior cattle in areas of heavy rainfall. The rainfall map of India more or less coincides with her cattle map.

Thus Punjab, Rajasthan, Saurashtra, Mysore and drier parts of Bombay and Madras are homes of some of the best cattle in India, while non-descripts are found in areas of heavy rainfall, like Assam, Bengal, Orissa and Malabar Coast.

Indian buffalo is superior to Indian cow. The best known buffaloes are of Punjab, Jafferbadi buffaloes of Kathiawar and the Surti and Pandharpuri buffaloes of the Bombay Presidency.

Another cattle wealth of India is *sheep*. Estimated number of sheep in India 4½ crores with an average produce of 8½ crores pounds of wool. The wool-producing provinces are Punjab, U.P., Rajputana and Western Indian States. The average production of wool per sheep in India is 1·9 lb. There is an Wool Analysis Laboratory in Poona for the research of wool fibre and various other improvements.

Sheep is reared chiefly for mutton and wool. The woolly sheep is found is Coimbatore, Mysore, large portion of Deccan, Rajputana, Punjab (both West and East), Bihar and Bengal. Bengal and Patna sheep are noted for their good yield of wool and fatty mutton. The Delhi-Hausi or the Tuttyghur sheep are the finest and the largest animals in India.

India's *goats* number about 58 millions of which 39 millions are in Indian sub-continent and 19 millions in Indian States. Goats are prized for their meat and milk. Goat contributes only 3 p.c. of the total milk supply of India.

Indian *pigs* belong to two principal species namely, Indian wild boar found throughout India and pigmy hog in the forests at the base of the Himalayas in Nepal, Sikkim and Bhutan. Pigs are useful for bristles, lard, meat (pork, ham, bacon) and skin.

Horses are mainly used for transport. The Kathiawar breed of horses known as *kathi* is famous for its great powers and endurance. The Marhatta pony, the little Gujarat and Dimthadi of the Deccan are also famous. The ponies of Manipur are regarded as the best in India. Bhutia pony is also famous for powers of endurance and weight-carrying capacity.

Animal Products—Besides animal products of milk and wool, the principal animal products of India are blood, bones, horns, ivory, tallow, and hides and skins. Bones are used as manure and for manufacture of buttons, handles, toys, glue and as a source of superphosphates. Supply of horns comes from U.P., Punjab, Madras and Bengal. Buttons, toys, manure, glue, gelatine, etc., are made by horns. Ivory is used for the manufacture of ivory goods, bones and teeth. This supply comes from Assam, Western Ghats and Mysore. Tallow is derived from the fat of beef, mutton and goats. It's principal uses are as an adulterant, lubricant, and illuminant and in the manufacture of soaps and candles.

Provincial Distribution—The largest number of oxen is found in the Uttar Pradesh which possesses 23·0 million head or nearly 14 p.c. of the total for the country. This is closely followed by Bengal where there are nearly 22·6 million oxen or approximately 13·6 p.c. p.c.; Madras 9·6 p.c.

of the total. For Buffaloes: U.P.—9·9 million or 29 p.c.; Punjab—6·92 million or 13·2 p.c.; Madras—6·1 million or 13 p.c.; Bengal—1·1 million or 2·3 p.c. of total buffaloes in India.

Density of Cattle Population—The densities of oxen per 10 acres of cultivated area, per 100 persons and per square mile of the country as a whole are 4343 and 106 heads respectively. The all-India average density of buffaloes works out to 12, 12, and 30 respectively.

Trade in Cattle—Bengal is the principal importer, followed by Bombay, U.P. and Bihar. The main exporting province in order of merit are Punjab, Bihar and Orissa.

Effect of Partition—The partition of the country has affected our cattle economy adversely. It is estimated that India is left with 137,704,000 cattle and 40,713,000 buffaloes and per capita milk consumption has been reduced from 7 ozs. to 5 ozs. India has also lost three of the best breeds of cattle—*Red Sindhi, Sahiwal* and *Therparkar*.

CATTLE IN INDIA

	Bull & Bullocks	*Cows*	*Buffaloes*	*Sheep*	*Goats*
1920-21	.. 46,569	35,795	17,967	22,023	24,045
1924-25	.. 48,558	36,433	18,849	23,140	38,982
1928-29	.. 48,650	36,484	19,080	22,987	37,223
1932-33	.. 48,988	36,518	19,436	25,117	35,249
1936-37	.. 48,563	36,936	20,420	23,754	36,249
1940-41	.. 46,855	36,445	18,995	28,520	39,254

LIVESTOCK IN INDIA

	1939
Horse	762,000
Asses	1,187,000
Mules	49,000
Cattle	137,974,000
Pigs	2,704,000
Sheep	41,505,000
Goat	50,270,000
Buffaloes	40,130,000
Camels	616,000
Chickens	57,408,000
Turkey*	18,000
Geese	236,000
Ducks*	16,644,000

* Including Pakistan.

Meat

(1,000 metric tons) 1945

Beef & veal	295
Pork	17
Mutton & Lamb ..	412
Total ..	724

Milk—1940

(1,000 metric tons)

Cow milk	7,487
Goat & Buffalo	9,350

Butter (1,000 metric tons)

Butter	65,000

Wool (1,000 metric tons)

1934-38*	43
1946*	36
1947	26
1948	26

* Including Pakistan

FORESTS IN INDIA

Forest Wealth of India—The forests in India play an important part in the country's agricultural and economic developments. The forests cover 1,60,356 square miles, or 15·2 p.c. of the total area. Of this area 55,282 sq. miles is private forest and remaining 1,04,670 sq. miles, managed by the Provincial and State Forest Departments. India contains an infinite variety of types of forest vegetation, governed by the variations in climate, soil, elevation and other local factors. The forests of India are a source of considerable wealth. They yield valuable timber. Our Railway system leans heavily on Indian timber; paper, plywood, bobbins, match industries depend on timber resources. The forests also yield large quantities of fuel. The variety and abundance of Indian economic forests products (technically called 'minor forest products') are perhaps unequalled in any other similar area in the world.

Full value of India's forest wealth is not to be assessed merely in terms of money, timber output, fuel and innumerable by-products; for, forest land serves other ends, by mitigating the extremes of the fiercest climate in the world and breaking the force of the world's heaviest rainfall.

Forest vegetation of India—is divided into five types—(1) *Evergreen,* (2) *Deciduous,* (3) *Dry,* (4) *Hill,* (5) *Tidal or Littoral. Evergreen* flourishes where rainfall is over 80 inches. They include many species of great economic value such as ebony, teak, rosewood, ironwood, bamboos, neem and tamarind. *Deciduous* occupies the larger part of the Deccan and is also known as monsoon forests. The trees are large-sized and form very remarkable timbers such as, teak, sal, paduk, redwood, sandal wood, anjan etc. *The Dry forests* are found in the desert regions of Sind, Rajputana and the Punjab and the plants are characterised by thick and fleshy stems and leaves and mostly consists of thickets of shrubs and a few stunted trees; many of them are leafless. *The Hill forests* are found in South India above 5,000 feet and in the Himalayas above 3,000 feet altitude. The trees are evergreen, of which the following are th most prominent—oak, picea, deodar, pines, firs, chestnut, walnut, maple, elm, ash, birches, laurels, poplar, rhododendron and species of abics. *The Littoral forests* are found in the deltas of the Ganges, the Mahanadi, the Indus and also to some extent in the regions washed by the high tide and salt water. They are rich sources of fuel. The forests are known as Mangrove Forests.

Classification of Forests—The forests are divided into four classes, *First,* protective forests, those which are necessary for the prevention of soil erosion and floods; *Secondly,* timber forests, which form a source of revenue to government; *thirdly,* minor forests which chiefly supply fuel, fodder and timber to local population; *Fourthly,* pasture lands which are not strictly forests but are under Forest Department for convenience.

Forests are further classified into *Reserve* forests, *Protected* forests and *Unclassified* forests. In reserve forests there is strict control of forest officers; in protected forests the local villagers usually have rights of grazing, fuel and fodder cutting which are recorded and supervised by forest officers. In the case of unclassified forests, there is no systematic attempt at their management.

Some Forest Statistics—India produces annually about 27,41,17,00 sq. ft. of various woods (both timber and fuel wood). From the official statistics it is estimated that the forest wealth of India amounts to 1,078,35,00,000 sq. feet and the annual cutting amounts to 27,06,93,000. The annual income of the Government of India from the Indian forests is about Rs. 10,48,01,000.

Central Board of Forestry—The Government of India have constituted a Central Board of Forestry in 1950 for the purpose of evolving an all-India policy to increase the area under forests. The functions of the Board are—(1) Coordination and integration of the forest policy pursued by States in the management of their forests, (2) adoption of conservation measures affecting forest resources and soil, (3) integration of plans for land use and national reconstruction in which forestry has come to play a progressively important role, (4) promotion of legislation considered necessary for various States for the management of private forests, (5) regulation and development of forests in inter-state river valleys which are the concern of the Central Government, (6) Maintenance of adequate standards for training of officers, (7) coordination of forest research conducted in Central and State institutes and (8) any other matters affecting forestry, which are relevant to the objective of the Board.

Preservation of Forests in India—The preservation of forests has become a national problem in India. India has been loosing its forest wealth for following reasons—(*a*) progressive exhaustion of soil due to the operation of the law of diminishing returns, (*b*) reckless burning, for the lack of alternative fuel, the cowdung which should go to fertilize the impoverished soil; (*c*) erosion of land which is increasing in alarming proportions. For this reason, various schemes are being mooted out. In 1950 *Vana Mahotsava* was originated which is a tree planting ceremony to be held every year.

Forest Education and Research—The scientific forest management in India owes its inception to Dr. Brandis, a professor of Botany from the University of Bonn, who was engaged by the Government of India in 1856 as superintendent of teak forests in Burma. Later in 1864 he was appointed first Inspector-General of Forests in India. It was as result of his initiative that Forest Departments were organised throughout India.

The nucleus of forest research and education in India is traceable to a forest school started in 1878 in Dehra Dun under the auspices of the Survey of India by the Government of N. W. Province (now Uttar Pradesh). The school enjoys the distinction of being the first of its kind in British Commonwealth. In 1884 the school was taken over by the Central Government. By 1906 this institution became the nucleus around which the existing organisation of the Forest Research Institute and Colleges have been built up. In 1912 special courses for the Provincial Forest Service officers were initiated and Institute was shifted to Chandbagh in 1914. In 1925 the Institute was housed in its existing premises of 1,300 acres acquired and constructed at cost of Rs. 1,300,000 and Rs. 6,300,000 respectively.

Primarily the work of the Institute is research into problems connected with rearing and protecting India's forests and enhancing their value and usefulness, and secondly the more efficient and profitable utilisation of timber and various other produce of these forests. Four excellent museums are maintained by the Institute. Of the four museums, one is known as the timber museum which is devoted to a display of the great variety of India's timbers in the form of polished and unpolished boards. It also contains demonstration models of wood seasoning, wood preserving and timber testing installations. The second museum is arranged to indicate the infinite range of India's forest products and to indicate the methods of their extraction and utilisation. The third museum houses large scale models to demonstrate silvicultural practices and the evils of soil erosion. The fourth museum draws attention to the extent of insect damage to Indian trees and the timber.

The Forest Institute also provides training for Forest Officers and Rangers.

Silviculture Branch of the Forest Research Institute carries investigations mainly concerned with different methods of raising crops, documentation of various crops, their silvicultural requirements etc. *Botany section* maintains an extensive herbarium. *Mocology Section* works on the standardization of Indian wood rotting fungi, fungus diseases of sal and diseases of conifers and similar other problems. *Wood Technology Section* carries on researches on the study of woods. There is also *wood seasoning section*. Another important All-India Forest College has been started by the Central Government at Coimbatore, Madras. Research in Forestry is also undertaken by Central Lac Research Institute.

India's Forest Products—The flora in India is both rich and varied in composition and value. The number of species met with is estimated at 30,000, the vast majority of which are of no more than academic interest. We may mention, however valuable timber species such as conifers (*pines, firs, deodars*), the principal species of the sub-tropical zone, and the well-known *teak* which is met with throughout the Deccan plateau. The chief among other species of commercial importance are *dipterocarpus, acacias sissoo, sandalwood* and *bamboos*. The forests in addition, yield a bewildering variety of minor forest products which are utilised in indigenous medicine and industry. The various plants and their derivatives account for items such as essential oils, resin, gums, medicinal herbs, fatty oils, vegetable dyes, tans, soap-berries, fibres, flooses, edible wild plants, canes, grasses. This is not all. Animal products such as honey, beewax, lac, bones, hides and horns play an important part in the home market and abroad.

Major products of the Indian forests are timber and fuel woods, and minor products are essential oils, dyeing and tanning substances, gums and resins, lac, beewax and honey etc. The principal varieties of timber is *Sal, Teak or Sagun, Jarool, Deodar, Sissoo, Toon*. The important trees of commercial importance are Oak, Rosewood, Sundri, Simul, Babul, Mulberry, Siris, Neem, Palas, Jam, Kusum and Mango.

Oil trees are *Chandan* or sandal-wood found in southern India (Mysore, Coorg, Western Ghats, Nilgiris). The oil is also extracted from the seeds and nuts of various other trees, such as *Chalmugra, Satinwood, Croton, Cocoanut, Oil Palm, Pine, Deodar, Kusum, Neem, Mohua, Garjan.*

The gum and resin yielding trees of India are *Babul, Catchu, Sal, Pine, Mango* and *Banyan*. *Asofoedita* or *hing* is available in Kashmir only.

Sal is very hard, heavy and tough wood with reddish brown colour. It is largely used as railway sleepers. It is also universally used for constructional and domestic purposes.

Teak is a strong wood of great durability. It is immune to attacks of white ants and insects for very long periods. It grows in the deciduous forests of the Deccan plateau in Madhya Pradesh, Orissa, Bihar, Bombay and Madras.

Arjun is heavier and harder wood than teak. It grows all over the deciduous region.

Kusum is a very heavy, hard and tough wood. It grows in the deciduous forests. 'Lac' insects are also reared on it.

Ebony is a very dark green or greenish black wood of great strength. It is obtained all over the deciduous regions excepting N.E. parts.

Siris is fairly strong wood. It is obtained all over deciduous forests.

Palas is important for its crop of 'lac' insects. It grows largely in Chotanagpur and also over the plains of northern India.

Mahua is very common in Chotanagpur area. Its flowers are important article of food. A course spirit is distilled from the Mahua.

Semul is well-known for the cotton it yields. Its wood is very soft and perishable and is suitable for matchbox manufacture.

Jarool is of medium strength and is employed for making cheap classes of furniture. It is found mainly in Assam, West Bengal, and is also found in Chotanagpur.

Deodar grows in Western Himalayas. It is extensively used as railway sleepers, also for bridge work and house-building, wood curving. It comes mainly from forests of Punjab and Kashmir.

Sisoo is used for agricultural implements, frames of carriages, boat-building, furniture and wood-carving.

Toon or Indian mahogany is used for furniture, wood-carving, boat and canoe making.

Oak is available in Eastern Himalayas, Khasi Hills and Manipur. It is used for buildings, agricultural implements, axe-handles.

Rosewood is found in various places from Nepal to Travancore. It is used extensively for furniture, cabinet-work, keels of vessels, agricultural implements, combs, ornamental articles, finely carved chairs and tables.

Satinwood is found in the dry forests of Circars, Konkan, Deccan and Karnatak and is common in Satpura range. It is largely used for cabinet work, picture frames, furniture etc.

Indian Blue Pine is grown extensively in the temperate Himalayas. It is used for planking, doors, windows and furniture, tea boxes.

Fir is grown in outer Himalayas, the Punjab and Kashmir and is used for packing cases, crates, shingles, boards and paper pulp.

Babul tree grows in Western India and is used for all forms of agricultural implements.

Sundri is available in the deltaic regions of Bengal, particularly in Sunderbans and in the coasts of Orissa. It is a very hard wood.

Canes and Bamboos are extensively found in Eastern Nepal, Sikkim, Bhutan, Assam, Bengal, Madhya Pradesh, Deccan, Konkan and Coromandal Coast. *Bamboos* grow everywhere in India. It has numerous varieties, from giant bamboo of Assam to dwarfs of dry region. It is used for paper making and for other various objects. Cane is used for basket works, mats, walking sticks, ropes and in the manufacture of paper.

Grasses are generally used for fodder for the cattle. *Sabai* grass is used for paper making. *Munjh* grass growing in all parts of India and specially in the Punjab is used for thatching, paper-making, chairs, baskets, ropes and cordage. *Rhea* grass found in Assam and Bengal is used for belting, sheeting, lace, net, cordage, sacking, etc.

Lac is an important Indian forest product. It is produced from an insect which secretes its larvae on certain class of trees. Lac is produced throughout the warm tropical areas of the whole of India. The principal places of production are M.P., Bihar, Bengal, Assam, Sind and Gujerat. Lac is extensively used in the manufacture of gramophone records, plastics, lacquer work, mouldings of ornaments, paint, and varnishes, sealing wax etc.

Bee Wax and Honey are also important forest products. Beeswax is used in candles, foundry moulding, calico printing and medicine. It is largely used by the shoemakers of India.

Gums and Resins—gum and resin yielding trees in India are *Babul, Catechu, Sal, Pine, Mango* and *Banyan.*

Tanning materials—various tanning materials are found from Indian forests, most important of which are myrobalan. They are found all over the deciduous forests.

Sandalwood is used for producing sandalwood oil and from oil, soaps and scents are made. It is mainly obtained in Mysore.

FOREST LANDS OF INDIAN PROVINCES

	Area (sq. m.)	*Forests Lands (sq. m.)*	*p.c. of Forest Lands*
Ajmer	2,367	593	25·1
Andaman & Nicobar Islands ..	2,500	2,500	100·0
Assam	55,445	21,637	39·0
Bihar	69,745	9,947	14·0
Bombay	76,026	12,872	16·9
Madhya Pradesh	98,573	47,057	47·7
Coorg	1,582	1,175	74·3
Punjab	38,780	4,761	12·3
Madras	1,25,163	33,666	26·9
Orissa	32,695	4,492	13·7
Uttar Pradesh	1,06,248	17,372	16·4
W. Bengal	28,215	4,284	15·2

TOTAL FOREST AREA

(*Square miles*)

	Total Forest area	*P.c. of total forest area to total land*
1939-40 ..	135,014	21·5
1940-41 (a)	135,161	21·5
1941-42 ..	157,931	25·1
1942-43 (b)	155,739	24·8
1943-44 (b)	154,934	24·6
1944-45 (b)	155,064	24·7
1945-46 ..	159,255	25·1
1946-47 ..	160,356	25·2

(*Vide Indian Forest Statistics,* 1949)

(a) excludes figures of Assam.
(b) excludes figures for Andaman & Nicober Islands.

OUTTURN—TIMBER AND FUEL—ALL FORESTS OF INDIAN PROVINCES

	Total (000 cu. ft.)
1934-38 (Average)	284,308
1939-46	199,248
1940-41	211,484
1941-42	223,032
1942-43	246,325
1943-44	264,795
1944-45	274,117

REVENUE OF FOREST DEPARTMENT OF INDIAN PROVINCES

(000 Rupees)

1936-37 to 1938-39 (Average)	25,443	1942-43	55,771
1939-40	25,735	1943-44	85,434
1940-41	31,629	1944-45	1,05,677
1941-42	38,938	1945-46	1,01,549
		1946-47	1,04,801

(*Vide Indian Forest Statistics*, 1949)

DAIRY FARMING

A large proportion of Indian population is vegetarian. Consequently milk is a valuable item of our diet. So the importance of dairy farming can not be over-estimated. The daily consumption of milk and milk products is 5 oz. per head where as the maximum requirement from the nutritional point of view is 21 oz. The average annual milk yield of the cow in India is 600 lbs. compared to 5,400 lbs. in Britain.

Milk Adulteration—Report of the Agricultural Marketing Adviser to the Government of India says in his report of 1950 that "adulteration of food-stuffs, including milk is not uncommon in Western countries, but the position is nowhere as bad as in our country. Adulteration is so widespread that consumers have became almost indifferent to quality".

Legal standards prescribed under State Food Adulteration Acts are lower than the constants for locally produced pure milk and therefore leave room for 'legalized' adulteration with water or skimmed milk. There is a strong feeling in the country that official control of the quality of market milk has been very lax.

The enforcement of the Food Adulteration Acts which rests entirely in the hands of the municipal authorities has been most unsatisfactory. The municipal authorities have therefore been urged to be more vigilant in the matter of quality control of milk and dairy products.

Poor Yield—Although India has 31·9m more milch cattle than all the countries of Europe (except Russia) taken together, her production of milk is only about one-fifth of that of Europe. The production of milk in India is also only about one-fourth of that in the U.S.A., although India has 60·6m she-buffaloes, (aged three and above) against 38·9m in the U.S.A.

The annual production of milk in India is estimated to be 481,600,000 maunds, valued at over Rs. 354 crores. Of the total production, buffalo milk accounts for 54·4%, cow milk 42·8% and goat milk 2·8%. The average annual yield of hand-drawn milk per cow in India is 413 lbs and per she-buffalo 1,101.

Milk production in India has not kept pace with the increase in human population. It is also believed that the milking capacity of the Indian cattle has deteriorated rather than improved during recent years. Most village cattle are semi-starved and badly managed. Better feeding and management of these cattle are likely to increase the output of milk by at least 20%.

Low Consumption—The average daily per capita consumption of milk, including milk products, in India is about 5 ounces as compared to the pre-war consumption of 41 ounces in the U.K. and 36 ounces in the U.S.A.

Within the country the average daily consumption varies from 18·8 ounces in Saurashtra to 1·2 ounces in Assam. Of this meagre quantity not more than 36% is consumed as fluid milk.

The average milking capacity of the Indian cow is very poor indeed. It is 525 pounds for the whole year. But there is a great possibility of increase as the special herds of cows of the Sahiwal breed have produced as much as 6,600 to 7,744 pounds.

The Indian buffalo is superior to the Indian cow as a milk producer, its annual performance being 1,270 lbs. as against 525 lbs. of the cow. The butter-fat in the milk of the Indian cow is 5 p.c., as against England cow's 3·8 p.c., in the buffalo it is 8 p.c.

Dr. Ackroyd, the nutritional expert with the Government of India says "the milk of Indian cows contains 25 per cent to 50 per cent more fat than that of European cows, while buffaloes' milk contains more than twice as much. The higher fat content of milk produced in India compensate to some small extent for the low yields per milking animal."

Bulk of milk supply of the country is produced in rural areas.

The principal centres of ghee are Khurja, Aligarh, Hathras, Shikohabad, Etawah & Balliah in U.P., Darbhanga, Dinapore and Lakhisarai in Bihar and Guntur in Madras.

Indian Dairy Science Association—was formed in 1948 with the object of advancing the cause of the science of dairying in India by co-ordinating and unifying the activities of dairy scientists in the country towards rapid advancement of nation's dairy industry.

Indian Dairy Council—has been inaugurated in 1948 with the object of promotion and safeguarding the interests of the dairy industry in India. It is a common platform on which representatives of various interests of the milk industry, such as producers, consumers, trade and technicians could meet together for developing it on sound and economic footing.

Dairy Education—There is an Indian Dairy Research Institute a Bangalore. Apart from its administrative office, farm and dairy, there are four research sections, namely, Dairy Husbandry, Dairy Chemistry, Dairy Technology and Dairy Bacteriology. The most important work carried out by the Dairy Husbandry Section relates to scientific breeding, feeding and management of dairy cattle in order to increase their milk yield. The institute also forms the centre for artificial insemination of dairy cattle. The institute offers training for the Indian Dairy diploma course for two years to students and a short course of three months' duration to men in the trade deputed by the Government. Besides these, the institute entertains a limited number of science graduates as honorary research workers for carrying out advanced research work and it also offers a post-graduate course for 15 months leading to the Associateship of Indian Dairy Research Institute. *The Veterinary Research Institute* at Izzatnagar, the *Dairy Research Institute* at Bangalore and *Cattle Breeding Station* at Jabbalpur carry out research on animal husbandry. The Veterinary Research Institute besides teaching and advisory work, manufactures biological products. The Dairy Institute carrys on development work in respect of pedigree herds of Red Sindhi, Gir and Tarparkar cows and Murrah buffaloes. The Cattle Breeding Station carries out cross-breeding of cattle under controlled conditions.

Ghee Production in India—The annual production of ghee in Indian Union is estimated at one crore and fifteen lakh maunds *i.e.*, half of what it was in undivided India ten years ago. In order of importance, the main ghee-producing areas are Punjab, U.P., Madras and Bihar which account for 15·7, 13·8, 9·8 and 5·4 of the total production respectively. Thus three-fourths of the ghee production is concentrated in Northern and Western India and the remaining two-fifths is scattered in the rest of the country. Taking the country as a whole, India produces 8·9 maunds of ghee per square mile, 21·4 maunds per village and 3·6 maunds for 100 persons. The annual per capita consumption of ghee in India is highest in Gwalior and Sind with 15·5 and 11·2 seers respectively and the lowest in Hyderabad and Bengal with 1·1 and 1·3 seers respectively. Of the total ghee production nearly 30 p.c. is retained by the producers for domestic consumption and 70 p.c. is marketed.

India imports about 66,000 maunds of ghee mostly by land frontier routes from Nepal. India also exports about 66,000 maunds of ghee to the Straits Settlements, Burma, Federated Malaya States and Africa (*From Ghee Marketing Report of the Government of India 1948*).

Ghee Adulteration—With a view to distinguish genuine from adulterated *ghee*, the Government of India have been developing an organisation for grading and marking of genuine *ghee*. The grading organisation started its work in 1938 and its mark is now known as Agamark. In 1947 the amount of agamarked *ghee* was about 2½ lakh maunds. The inadequacy will be clear when we see that this 2½ lakh maunds of certified agamarked ghee constitutes only 2·2 per cent of the ghee produced in the country. On an average only one sample is collected and examined for every 550 maunds of ghee consumed in the country. Experience has shown, generally speaking 50 per cent of the samples tested are found to be adulterated.

At present the grading under the Agamark is voluntary.

The ghee adulteration by the mixing *vanaspati* (Hydrogenated oil) has become so widespread that the Government of India have been compelled to put the matter in the hands of a Expert Committee. The Committee is now experimenting to make the vanaspati coloured, so that it cannot be mixed with ghee.

Plan for increasing Milk Production—A Five year plan for increasing milk production has been prepared by the Dairy Development Adviser of the Ministry of Agriculture—(1) milk-cum-bull production farms, (2) small holder milk production farms, (3) colonisation of dislodged city cattle, (4) artificial insemination of cattle, (5) cross-breeding of inferior milch stock, (6) cooperative milk union, (7) cooperative rural creameries (ghee) and (8) increased production of green fodder and silage.

INDIAN STATES

Princely Order on the eve of Independence—On the eve of the Independence, one of the most inticrate problems was the question of the anachronistic Princely Order. Free India could not calmly contemplate its new map dotted with no fewer that 550 territorial units under the autocratic rule and at different stages of social, economic and educational development.

Cabinet Mission's plan in 1946 stated that the rights of the States which flowed from the Crown would no longer exist and the rights surrendered by the States to the Paramount Power would revert to the

States. The void caused by the lapse of paramountcy was to be filled either by the States entering into a federal relationship with the successor government or governments or by entering into particular political arrangement with it or them. Cabinet Mission's plan was followed by His Majesty's Government Plan of June 3, 1947 which completely supported Cabinet Mission's Plan in respect of Indian States. The Independence Act passed by the British Parliament which transferred the power to Indian hands laid down that suzerainty of the Crown over Indian States had lapsed and along with it all treaties and agreements, obligations, powers, rights etc. So the Independence Act of 1947 released the Indian States from all their obligations to the Crown. The Rulers were given full liberty to choose their future constitutional status.

It was now evident that if in consequence of the passing of the Act, the Indian States became separate independent entities, there would be a serious vacuum not only in regard to political relationship between Central Government and the States but also in respect of the co-ordination of Indian policies in the economic and other fields. So when the British left India, the question of independence of the States and their accession to Indian Union remained undetermined and it was feared that the situation might be exploited by reactionaries.

However, the new Government acted promptly. On July 5, 1947, it constituted a separate *States Department* with the late Sardar Ballabhbhai Patel at its head. He addressed the Princes in the following manner—

"We are all knit together by the bonds of blood and feeling no less than of self-interest. None can segregate us into segments; no impassable barriers can be set up between us. I suggest that it is therefore better for us to make laws sitting together as friends than to make treaties as aliens. . . . I hope the Indian States will bear in mind that alternative to co-operation in the general interest is anarchy and chaos which will overwhelm great and small in a common ruin if we are unable to act together in the minimum of common tasks."

It must be said to the eternal credit of the Princes, that they rose to the occasion in a spirit of patriotism. The princes did not take shelter behind a narrow legalistic formula of their time-worn treaties with the British or antiquated prerogatives and powers.

So by January, 1948, all the States contiguous to Indian territory had acceded to India except Hyderabad and Junagadh. Before the end of 1948, those two States had also joined the Indian Union. Only in Hyderabad, a provocative situation was created by a band of fanatics known as Razakars in Hyderabad by their orgy of plunder and massacre in their attempt to establish a communal muslim state. But after much forbearance, the Indian Government took swift and bold police action and freed Hyderabad from the hands of Razakars. On November 23, 1949, the Nizam issued a Proclamation accepting constitution framed by the Constituent Assembly of India as the constitution for the State of Hyderabad subject to ratification by the people of the State.

Pakistan began to put strong economic pressure on Kashmir which grew into a full scale blockade against the State. This was followed by a mass invasion of tribal people, aided and abetted by Pakistan. On October 24, 1947 Kashmir appealed to India to accept Kashmir's accession to India. On October 27, Government of India accepted the accession of Jammu and Kashmir.

Once all the States rallied under the national banner of India, the Ministry of States set to working at the unification of diverse units, territorially, politically, administratively and economically under a common system of law and government. The policy adopted by the Government of India was democratization and integration. Integration or consolidation of the States into sizeable units, was therefore the first task of the Government. It took three forms—

(1) merger of some States into adjoining Provinces;
(2) grouping of other States into Union of States;
(3) taking over a few States to be administered centrally.

Three States which were already of considerable size were left out of this scheme. They were Hyderabad, Jammu and Kashmir and Mysore. In the case of others, the process of integration led to the disappearance of inter-state boundaries and customs barriers, if any, and to the levelling up of administration to the standards obtaining in the former Indian provinces.

This remarkable change started with Chattisgarh States which on January 1, 1948 merged with the State of Orissa. The last State to merge was Cooch Bihar which joined West Bengal on January 1, 1950. In all 216 States with a total area of 108,739 square miles and a population of 19·158 millions were involved in this merger process.

The States taken over as Centrally administered areas numbered 61, covering an area of 63,704 square miles with a population of 6·925 millions. These have been formed into seven Centrally administered areas.

The first Union of States was born when 217 Kathiawar States and hundreds of Estates joined to form a new Union called Saurashtra. Altogether 275 States covering an area of 215,450 sq. miles with a population of 34·7 millions were integrated into five such Union of States. Today, the map of India shows fifteen States recognizable as former princely States, but so unified and integrated as to be hardly distinguishable from other democratic states. By January 26, 1950, this process of territorial integration of the States had been completed. This revolution was effected by the new government in some two and a half years and without recourse to arms except the five day police action in Hyderabad. The total number of States affected by integration schemes was 552. They covered an area of 387,893 square miles and had a population of 60·783 millions.

Results of Integration—The integration of States has conferred manifold benefits on the people. These results are enumerated below—

Democratization—(1) The Provincial Legislatures have now been expanded to include in them representatives of the merged States. (2) Advisory Councils with a majority of popular representatives to assist Chief Commissioners in the Centrally administered areas have been established while in some cases legislative assemblies and ministers have been formed. (3) Popular interim ministries have been set up to conduct the administration of the Union of States.

Administrative reorganisation—services of experienced advisers have been made available to the Union of States and senior officers of all India services have also been deputed to fill key posts. In a few Administrative Services have been constituted as in Part A States. Public Service Commissions have been set up everywhere. High Courts have been established in all the Unions, while Controller and Auditor-General of India has taken over the audit and accounts organisation.

Land and Revenue Reforms—Problems of Zamindari and Jaigirdari systems are being seriously tackled in these states. Already bills have been drafted to abolish them in Madhya Bharat and Rajasthan. In Hyderabad the Jagirs have been taken under management. Legislation for the abolition of Girasdari and similar tenures have been passed by the State Legislature of Saurashtra. In Pepsu permanent rights have been conferred to certain classes of occupancy rights. Forced labour and other forms of feudalism have been made illegal in all the States. The custom barriers between the integrating States have been abolished. In Part C States a large number of local feudal levies and land taxes have now been abolished. Begar has been prohibited.

Financial Integration—A committee under the Chairmanship of Shri V. T. Krishnamachari prepared a scheme of federal financial integration on the basis of complete equality between Part A and Part B States. Subject to certain modifications to suit local conditions, this scheme has been accepted by the Government of India and Part B States (other than Jammu and Kashmir) and was brought into force from April 1950.

Formal agreements have been entered into with the Rajpramukhs of Part B States under relevant provisions of the Constitution. These cover *inter alia* the following matters: financial adjustments on revenue account for the transitional period of 10 years; the gradual raising of rates of income-tax in the States to the all India level; the apportionment of assets and liabilities following the distribution of functions between the Centre and the State; the taking over of liability by the Centre for the payment of the Privy Purse to the Rulers of former Indian States, subject to transitional adjustments in certain cases; and the gradual abolition of internal customs in certain States.

In consequence of these Agreements, the administration of Central subjects like Defence, Railways, Communications, Broadcasting, etc., has been taken over by the Centre, though some minor departments have been left to be administered by the States on an 'agency' basis.

The scheme contemplates the payment of grants-in-aid to those States which would suffer dislocation in their finances by the transfer of 'federal' revenues and 'federal' expenditure to the Central Government. The individual Agreements with these States also provide for adjustments justified by special circumstances in each State.

The scheme of federal financial integration, in the manner evolved for Part B States, has also been made applicable to the States merged in the former Indian provinces from the date on which the administration of the States was actually taken over by the provinces concerned.

The financial integration has paved the way for the adoptation of uniform laws, rates, interpretation and administration of all fiscal measures. This, in turn, has resulted in uniform policies, principles and practices in the levy, assessment and collection of Central taxes and duties. The development of industry and commerce has been facilitated by a co-ordinated trade and tariff policy, common banking laws and commercial legislation, common system of communications and transport, etc. The gradual abolition of internal customs duties has helped the freedom of trade within the country.

Through their share of federal revenues, the development programmes in the States will receive greater impetus. The Planning Commission is evolving a 2-year and a 5-year plan for these States, in consultation with their Governments.

Indian States Forces—With the Centre taking over the responsibility for Defence, Indian States Forces have been integrated into the Indian army.

All-India Services—Five independent cadres of the IAS have been constituted for Hyderabad, Mysore, Rajasthan, Madhya Bharat and Travancore-Cochin. Saurashtra, Pepsu and Vindhya Pradesh are to have joint cadres with the neighbouring States.

A similar scheme in respect of the IPS has also been evolved. In addition, a number of officers from the Centre and Part A States have been lent to them.

Private and State Property—In the past the Rulers could freely make use of any State-owned property. They no longer have any such right. Their private properties have been separated from the properties belonging to the States.

After the integration of the States, the new Government inherited cash balances and investments to the value of nearly Rs. 700 million. During the settlement of private properties, the Rulers gave up their claims to nearly another Rs. 45 million. In Hyderabad the Nizam surrendered his Crown lands (Sarf-i-Khas) extending over 10,000 square miles and yielding a revenue of Rs. 3 crores. Other properties given up by the Rulers include palaces, buildings, stables, garages, shops, jewellery, fleets of motor-cars, aeroplanes, etc.

Each Ruler has been assigned a privy purse, the payment of which has been guaranteed by the Constitution.

States & the Constitution—The legislative and executive authority of the Union now extends to all the territories, including the States. The fiscal relationship of the States with the Centre will also be the same as that between the provinces and the Centre. The Auditor-General of India will have full control over the audit systems in the States as in the provinces. The jurisdiction of the Supreme Court also extends to the same extent as in the provinces. The High Courts of the States are to be constituted and will function in the same manner as the provincial High Courts. The same fundamental rights and the same legal remedies to enforce them will be enjoyed by the people of the former Indian States as in the provinces. Both as regards their constitutional relationship with the Centre and their internal organization, the States are now on a par with the provinces. The new Constitution thus eradicates all artificial barriers which separated the Indian States from the rest of India and achieves, for the first time, the objective of a strong, united and democratic India.

PRIVY PURSES GUARANTEED TO RULERS OF INDIAN STATES

States merged in Orissa

	Per year Rs.		Per year Rs.
Athgarh	36,100	Baudh	69,300
Athmallik	48,500	Bonai	52,800
Bamra	95,300	Daspalla	33.500
Baramba	22,700	Dhenkanal	89,700

Gangpur	1,35,100	Patna	2,49,600
Hindol	32,000	Rairakhol	29,700
Kalahandi	1,14,000	Ranpur	25,000
Keonjhar	1,11,500	Sonepur	76,700
Khandpara	33,600	Talcher	62,500
Mayurbhanj	3,27,400	Tigiria	11,200
Narsinghpur	28,100		
Nayagarh	62,800		
Nilgiri	40,000	Total	18,12,100
Pal Lahara	25,000		

States merged in Bihar

Kharsawan	33,000		
Seraikhela	88,900	Total	1,21,900

States merged in Madhya Pradesh

Nandgaon	3,53,650	Korea	2,78,700
Bastar	2,10,100	Khairagarh	1,02,300
Kankar	68,700	Surguja	1,45,300
Udaipur	50,000	Jashpur	66,300
Sakti	29,000	Changbhakar	17,300
Chhuikhalan	20,300	Makrai	25,000
Raigarh	1,72,600		
Kawardha	63,800	Total	16,66,650
Sarangarh	63,600		

States merged in the Punjab

	Rs.	Dujana	34,000
Loharu	50,000	Pataudi	48,000
		Total	1,32,000

States merged in Madras

Banganapalle	53,900	Sandur	90,000
Pudukkottai	2,66,500		
		Total	4,10,400

States merged in Bombay

Ambaliara*	26,000	Ilol*	8,750
Balasinor	68,000	Jambughoda	70,000
Bansda	1,60,000	Jawhar	1,24,000
Baria	2,25,000	Khadal	14,500
Bhaderva*	29,300	Katosan	12,100
Cambay	1,38,000	Lunawada	1,31,000
Chhota Udepur	2,12,000	Malpur	40,600
Danta	92,000	Mohanpur*	15,310
Dharampur	1,50,000	Mansa*	40,000
Ghodasar	22,600	Palanpur	2,75,000
Idar	3,28,000	Punadra	8,100

* Provisional.

Radhanpur	1,29,000
Ranasan	17,100
Rajpipla	3,97,946
Sachin	72,000
Sant	1,12,000
Sudasna*	28,000
Surgana	30,000
Valasna*	10,660
Varsoda	12,500
[illegible]rapa*	2,560
Sathamba	18,800
Umeta*	19,200
Magodi	6,700
Palaj	3,500
Tajpuri*	2,530
Prempur*	2,860
Kurundwad (Junior) (two shareholders) ..	56,000
Akalkot	73,783
Savanur	30,316
Miraj (Senior) ..	85,800
Miraj (Junior) ..	50,454
Mudhol	55,300
Vasna	15,100
Vijayanagar	50,000
Wao*	30,520
Sanjoli*	29,150
Tharad*	35,000
Vakhtapur	4,700
Likhi*	2,690
Mandva*	18,720
Dedhrota*	2,140
Phaltan	1,40,442
Sangli	2,62,639
Aundh	75,212
Ramdurg	32,486
Bhor	89,042
Jamkhandi	91,163
Jath	49,924
Kurundwad (Senior) ..	49,924
Sawantwadi	1,07,500
Wadi Jagi	6,000
Janjira	1,33,500
Baroda†	26,50,000
Kolhapur	10,00,000
Total	82,83,121

States merged in Uttar Pradesh

	Rs.
Tehri Garhwal ..	3,00,000
Banaras	3,00,000
Rampur*	7,00,000
*(Rs. 6,60,000 for successors)	
Total ..	12,80,000

State merged in West Bengal

Cooch Behar*	3,50,000
* (Rs. 7,00,000 for successors)	
Total	8,50,000

States constituting the Patiala and East Punjab States Union

Patiala	17,00,000†
Kapurthala ..	2,70,000
Nabha	4,10,000
Jind	3,28,100
Faridkot	3,81,000
Kalsia	65,000
Nalagarh*	60,000
*(Rs. 45,000 for successors)	
Malerkotla ..	1,10,000
Total ..	33,24,500

---

* Provisional

† This amount only for the life time of the present ruler.

States constituting Travancore-Cochin

Travancore	18,00,000*	Cochin	2,35,000
		Total	20,35,000

States constituting Madhya Bharat

Gwalior	25,00,000*	Narsingarh	1,15,000
Indore	15,00,000*	Rajgarh	1,40,000
Alirajpur	95,000	Ratlam	1,50,000
Barwani	1,45,000	Sailana	70,000
Dewas (Senior)	1,45,000	Sitamau	48,000
Dewas (Junior)	1,80.000	Mathwar	6,000
Dhar	2,90.000	Piploda	30,000
Jhabua	1,27,000	Pathari	18,250
Jobat	32,500	Muhammadgarh	12,000
Kathiwara	32,000	Nimkhera	20,000
Khilchipur	60,000	Jamnia	12,000
Kurwai†	60,000	Rajgarh	5,000
		Total	59,67,750

States constituting Rajasthan

Alwar	5.20,000	Tonk	2,78,000
Bharatpur	5,02,000	Jaipur	18,00,000*
Dholpur	2,64,000	Jaisalmer	1,80,000
Karauli	1,05,000	Bikaner	17,00,000*
Banswara	1.26,000	Jodhpur	17,50,000*
Bundi	2,81.000	Lawa	12.500
Dungarpur	1,98.000	Kushalgarh	34.775
Jhalawar	1,36.000	Nimrana	15,000
Kishengarh	1.36.000	*Sirohi** (a portion merged in Bombay)	2,12,600
Kotah	7.00.000		
Mewar	10.00.000		
Partabgah	1,02,000	Shahpura	90,000
Shahpura	90,000		
		Total	101,42,875

States constituting Saurashtra

Nawanagar	10.00.000	Jafrabad	16.000
Bhavnagar	10.00.000	Wankaner	1,80.000
Porbandar	3.80.000	Palitana	1,80,000
Dhrangadhra	3.80.000	Dhrol	1,10.000
Morvi	8.00.000	Limbdi	2.30.000
Gondal	8,00,000	Rajkot	2,85,000

---

* This amount for the present ruler only.

† Rs. 48,000 for successors.

Wadhwan	1,42,000	Kotda Sangani	67,000
Lakhtar	91,000	Jetpur	1,21,536
Sayla	62,500	Bilkha	1,00,000
Chuda	51,250	Patdi	20,000
Vala	88,750	Khirasra	30,000
Jasdan	1,50,000	Vanod	38,430
Amanagar Thana Devli	1,00,000	Barwala	36,510
Vadia	78,250	Katodia	192
Lathi	77,500	Lodhika	15,690
M[illegible]	53,000	Vasavad	34,400
Bajana	65,500	Jalia Devan	16,135
Virpur	44,500	Zainabad	33,800
Maliya	47,500	Vithalgadh	(Under consideration)
		Total	69,26,443

States merged to form Centrally administered areas

	Rs.		Rs.
Himachal Pradesh		*Vindhya Pradesh*	
Tharoch	18,100	Ajaigarh	74,700
Chamba	1,38,000	Baroni	46,850
Mandi	2,20,000	Baraundha	14,500
Suket	60,000	Bijawar	70,700
Keonthal	39,700	Chhatarpur	1,00,350
Sirmur	1,35,000	Charkhari	95,900
Baghat	80,000	Datia	1,54,300
Balsan	11,250	Maihar	56,500
Bashahr	80,000	Nagod	55,400
Jubbal	1,01,000	Orchha	1,85,300
Mahlog	16,500	Panna	1,47,300
Dhami	15,760	Rewa	10,00,000
Bhajji	16,000	Samthar	51,800
Kuthar	9,000	Alipura	28,150
Kumarsain	15,500	Banka Pahari	3,000
Baghal	18,700	Beri	7,750
Mangal	3,000	Bhaisaunda	5,600
Kunihar	4,200	Bihat	5,600
Darkoti	3,000	Bijna	3,000
Sangri	4,200	Dhurwai	5,000
Beja	3,000	Garrauli	10,050
Delath	3,000	Gaurihar	15,000
Ratesh	3,000	Jaso	8,600
Rawingorh	3,000	Jigni	5,950
Dhadi	3,000	Kamta Rajaula	5,000
Ghund	4,200	Khaniadhana	15,600
Khaneti	4,400	Kothi	15,400
Theog	20,000	Lugasi	10,100
Madhan	5,200	Naigawan Rebai	5,000
Koti	27,250	Pahara	5,300
*Bhopal**	11,00,000	Paldeo (Nayagaon)	10,400

*9,00,000 for successors.

	Rs.		Rs.
Himachal Pradesh		*Vindhya Pradesh*	
Bliaspur	70,000	Sarila	18,650
Kutch	8,00,000	Sohawal	25,900
Tripura	3,30,000	Taraon	5,850
Manipur	3,00,000	Tori Fatehpur ..	7,000
		Total ..	59,40,460

States which have not been affected by merger schemes

Hyderabad ..	50,00,000*	Mysore	26,00,000*
		Total ..	76,00,000

Jammu and Kashmir† 15,00,000

FISHERY IN INDIA

India is remarkable for its abundant fish fauna which accounts for the large section of its population depending on fishes as the staple protein dish.

With a coastline of 2,900 miles, a continental shelf of more than 100,000 square miles, into which numerous large, perennial rivers discharge their silt-laden waters, innumerable gulfs, creeks, bays and oceanic islands, the marine fisheries resources of India must be quite considerable. Similarly, the extensive backwaters, estuaries, lagoons and swamps, numerous rivers, streams and channels and a very large number of perennial and semi-perennial lakes, beels, reservoirs, tanks, ponds and other stretches of water, a large proportion of which is culturable, are a rich potential source of inland fisheries.

The number of adult fishermen in India is believed to be of the order of 500,000. The total number of boats, catamarans and other craft has been estimated at more than 70,000. Yet, the average catch per person per year probably does not exceed 2,500 pounds. In the U.S. trawler fisheries, the catch per man per year is more than 80,000 pounds and in the Californian sardine fishing operations as much as 200,000 pounds.

Development of our fisheries was fully realised as a result of the food shortage at the end of the Word War II. The Government of India set up a small central organisation and took steps to develop fisheries in this country, such as financial and technical assistance under Grow More Food Campaign and also help to the States for implementing their approved schemes of fisheries development in the form of loans and subsidies. These schemes are of various kinds, such as survey and stocking of inland culturable waters to pilot scale fishing in offshore and deep sea water with modern power vessels. Second line of approach to improvement is the undertaking of research, pilot experiments and training, etc. This means fundamental and lasting benefit to the development of fisheries. Two fisheries research stations have been established, one for marine at Mandapam in South India and the other, for inland fisheries at Barrackpore, near Calcutta. Each station is staffed by a band of highly qualified research workers.

---

* Note: The amounts fixed in these cases are only for the life time of the present Rulers.

† Six lakhs paid by the Kashmir Government and balance 9 lakhs by Government of India under the head "Aid to Kashmir" as a loan to the State.

Some of the States are also engaged in research work with the object of training fishery workers to meet the requirements of State Governments. The Government of India have been running two fishery training centres at their two fisheries research stations.

With the object of developing marine fisheries in India, for which a great deal of information regarding our fishing grounds, fishing seasons, suitability of different types of vessels and equipment for use under Indian conditions, the Central Government have establishd a pilot deep-sea fishing station at Bombay. In addition to charting fishing grounds off the Bombay coast, this establishment is bringing out considerable quantities of fish as a result of their operations.

Inland Fisheries—are the cheapest and quickest source of fish supply in any country. India and today is perhaps more advanced than most of the countries of the world in inland pisciculture. Large areas of water in many States are being stocked at present, yielding 10 maunds or more per acre. In this stocking operation the most important point is the adequate supply of fish-seed. Apart from the fact that stocking has to be done afresh every time, sources of spawn and fry of carp have not yet been located in many States. In this fish spawn trade, Bengal occupies superior position. Other States coming next are Bihar, Orissa, U. P., Delhi and Punjab. Another easy way of fish producing is the stocking of brackish waters, like the extensive backwaters of Cochin where sluice gates are provided for inflow and outflow of water to bring young of certain fishes into stocking tanks with the tides.

Deep Sea Fishing—While the development of inland fishery resources is expected to yield considerable return, the large gap between production and requirements can only be made up by the exploitation of our extensive marine resources. Fishing in Indian seas is, however, confined to a narrow coastal belt of five to seven miles only. This is largely because the equipment used for sea fishing consists mostly of small boats, canoes, catamarans and of small nets and tackles which are not of a type which can stand the rigorous and requirements of off-shore or deep-sea fishing. These fishing people, poor as they are, have acute problem of procuring nets, timber for boats, sailing cloth, fish hooks and coal tar etc., which are short in almost all parts of the country. In addition to this difficulty, these fishing folks cannot go beyond the coastal belt—all their time is spent up in reaching the fishing ground and bringing their catch to the market. So the mechanization of fishing operation has become an absolute necessity.

To start deep sea fishing on a commercial scale, the first requisite is to collect essential data regarding fishing grounds, the type of crafts and gear that would be suitable, the species of fish that may be available in different parts of the sea, in different seasons and similar other essential information. Collection of such data which, at the outset, cannot yield economic returns commensurate with the expenditure involved can only be undertaken at the Government level. When sufficient information has been collected, private enterprise may enter the field to take it up as a profitable undertaking.

Refrigeration—Another important item for the improvement for fish production in India is the refrigeration without which this problem can not be solved. At present, though large quantities of fish are being caught, but for the want of refrigeration facilities and transport, only a small portion of the catch can be used in a fresh condition. So for the better supply of fishes, two things are absolutely necessary—(1) quick transport of fresh fish from large assembly centres to some of the towns in fast motor vans, (2) provision of refrigerated rail transport. For the quick freezing and cold storage, plants are the ideal solution for the proper preservation of fish and also erection of as many ice factories as possible, so that adequate quantities of ice may be available at all important fishing and consuming centres.

Fish Curing—For the lack of adequate transport and other facilities, it is estimated that more than 50 per cent. of our fish production is being cured in various ways. A large quantity is consumed in this country but a lucrative export trade in this commodity with Ceylon and other countries has also been established. More that 150 fish curing yards have been established by governments along the coasts of India.

Varieties of Fishes—Seas around India are rich in variety of fishes. Plenty of sharks are available in the Bay of Bengal, Arabian Sea and also along Coromandel and Konkan coasts. Sardines, herrings, anchovies and shades form the bulk of our food fishes and rank first in commercial importance. Mackerel, horse-meckerel and perches come second. The other remaining marine fishes are Jew-fishes. Indian salmons, cat fishes, bombay ducks, pomfrets, mullets, silver bellies, ribbon-fishes etc., which are small sized groups.

Regarding fresh water fishes, carps form the most highly esteemed variety, such as, *Rohu, Calta, Mrigal* and *Calbasu* which are well-known throughout India: other important variety is cat fish, wallago, bagarious, clarius, silundia and macrones belong to this class. There are also miscellaneous fishes such as murrels tc. Trout has been introduced into the hill streams in Kashmir, Kumaon and Nilgiri Hills.

Fish Products—Besides articles of food, fish yields several by-products. The most important is fish oil, such as, Sardine oil and Shark-liver oil which are now being produced on commercial basis in India. The oil is used for the manufacture of paints, soft-soaps, for softening hides, for temparing steel etc. Fish liver oil produces vitamins A and B indispensable for wasting diseases. It is being manufactured by the governments of Bombay, Madras and Travancore. Indian fishes such as Salmons, Jew fishes, Cat-fishes are yielding 'Isin-glass', a valuable article for the clarification of wines. Fish-scraps are converted into fish meal as additional protein food for poultry and livestock. Fish refuse are being dried as manure.

Fish-curing is also an important supplementary trade. The chief methods of curing fish in India are sun-drying and salt curing, either by dry or wet process.

Fish-Eating Population—Fish is eaten by nearly 50 per cent of the population. It is an important active food in Bengal, Bombay, Orissa and Madras, but owing to the very limited supplies not more than a *'chhatak'*, of fish per head per week is available. The minimum needs of the fish-eating population is 2 'chhataks' at an average a day per person. It is estimated that *per capita* consumption of fish in India is only 3·36 lbs.

per year. This compares very unfavourably with the consumption of approximately 16 lbs. in Ceylon, 70 lbs. of Burma, 90 lbs. in Japan and even more in some other countries.

Centre's Financial Aid To States—Fishery schemes have been included within the ambit of the Grow More Food Campaign of the Government of India and special financial assistance has been given by the Centre to the States. Till now, about 50 schemes at a total estimated cost of Rs. 1,30,00,000 have been launched. The financial assistance is being given by the Government of India to the States. These schemes which are mostly for development of inland fisheries aim at:

(*a*) Collection and distribution of fry of carps and other fast growing species of fish for stocking in inland waters. Arrangements have been made whereby States having a surplus of fry will supply to the deficit States such stocks as they are spare.

(*b*) Improvement in the quality of cured fish and prawns by providing better facilities at fish curing yards. The fish curing yards at Bombay have recently been improved and the Government of Travancore-Cochin Union have set up a Model Fish Curing Yard with financial assistance from the Central Government.

(*c*) Better utilisation of the existing catches by suitable methods of preservation, transport and marketing.

(*d*) Utilisation of fish wastes for the manufacture of fish meal and manure; and

(*e*) Establishment of co-operative societies of fishermen for the supply of fishing requisites and improving their economic conditions. Co-operative societies which are being encouraged aim at improving the economic condition of the fishermen by providing the necessary credit for their trade and also supply efficient fishing requisites which can increase their catch.

Fish Research—There are three fisheries research stations in India at present, namely, (1) Central Inland Fisheries Research Station at Barrackpore, (2) Central Marine Fisheries Research Station at Mandapam, South India and (3) Pilot Deep-Sea Fishing Station. Bombay, which are maintained by the Government of India.

The first two stations carry on investigations on biological, hydrological, statistical and other problems relating to inland and marine fish and fisheries respectively and the Deep-Sea Fishing Station, Bombay, conducts exploratory work in respect of charting of fishing grounds and collects other valuablee data necessary for commercial fishing around the coast of Bombay. In addition, the inland Fisheries Research Station at Barrackpore trains students, both private and State-sponsored, in inland fisheries.

These stations are wholly financed and run by the Government of India.

The new methods introduced for increasing fish production are (1) supply of fish fry and fingerlings by the Central Inland Fisheries Research Station, Barrackpore, to the deficit areas and (2) effecting reduction in the morality of fish fry and fingerlings and (3) trying out different kinds of modern methods of fishing in deep-sea waters.

INDIAN IRRIGATION

Usefulness and Greatness of Indian Irrigation—India leads the world in irrigation and despite the loss of a very large part of the best irrigated lands to Pakistan as a result of partition, about 48 million acres are irrigated annually in India. Of this acreage, about 17 millions are irrigated through canals managed mostly by State agencies. The rest of the irrigation is done through tanks, surface percolation wells, tube wells, etc.

Importance of Irrigation in India can easily be estimated when it is realised that agriculture maintains about nine-tenths of population in India and rainfall is unevenly distributed, precarious and uncertain in several parts of the country. Cultivation is not possible in many parts of the country without irrigation. Partition of the sub-continent hit India badly in respect of food supplies. Although 82 p.c. of the pre-partition population remained in India, only 69 p.c. of rice, 66 p.c. of wheat and 69 p.c. of irrigated area fell to India's share. So to ensure adequate food supplies for growing population, it was essential to harness our rivers and thus extend irrigation facilities to areas which were hitherto lying unused for want of water.

India is fortunate in her immense resources in water and her widespread waterways. But at present the bulk of this water runs in uncontrolled floods, doing damage to life and property. Roughly 6% of the available water-wealth in India's rivers is being utilized, the balance runs to waste and in its progress to the sea does incalculable damage to life and property through uncontrolled floods.

Irrigation in India was not introduced by the British. It had been practised in India from time immemorial. The *Grand Anicut* across Coleroon river in Tanjore was built by the Hindu Chola Kings and the Mughal Emperors of Delhi. And within recent years development in this direction is almost phenomenal.

Multi-purpose Schemes—India is well-placed in respect of overall water resources and power potential. It is increasingly being realised that while a project conceived for a single purpose like irrigation or flood control might not be an economic proposition, it might become a financially feasible and productive scheme, if it included other purposes like power generation, navigation etc. Therefore multi-purpose river development on a regional basis has found great favour with the Central, and State governments to provide simultaneously for control of floods, for development of electric power, irrigation and navigation; for fish culture, the control of malaria, and for recreational facilities.

The Central Government have already embarked on enterprises like larger river-valley developments which are multipurpose projects of a great magnitude involving extensive generation of hydro-electric power and irrigation on a vast scale. Some of the world's largest multi-purpose projects are under construction in various parts of the country, while many others are in advanced investigation stage. Such great projects as Damodar Valley Scheme, Bhakra Project, Kosi Project, Hirakud Project, Ramapadasagar Scheme and the Koyna and Kalinadi Projects are part of a stupendous programme for the development of irrigation and power demanding for their successful and speedy execution the utmost skill, expert knowledge and experience from the country's engineers and technicians.

Government Departments—The Ministry of Works, Mines and Powers is responsible for the Irrigation, Mines, Hydro-electric and other electric schemes in India. The Indian Union has two central statutory bodies for the work of irrigation—(1) *Central Board of Irrigation* with a Research Committee and a Bureau of Information and (2) *Central Water Power, Irrigation and Navigation Commission.* The Central Board of Irrigation is a national committee in India for the International Commission on Dams and the proposed International Commission on Irrigation and canals. It is also the *liason* body for International Association for Hydraulic Structures Research and runs the Indian National Society for Soil Mechanics and Foundation Engineering. The Central Water Power, Irrigation and Navigation Commission is a central fact-finding planning and coordinating organisation to advise Central, Provincial and State Governments in regard to waterways, irrigation and navigation problems throughout the country. The Commission has seven sections, each under a Director to deal with irrigation, waterways, navigation, hydrology, designs, publications, statistics and research. It has an up-to-date information bureau and library on engineering subjects and publishes valuable material, for the information of engineers all over the country. An important activity of the Commission is the Research Station at Khadakvasala near Poona which is endeavouring to determine the best form of structures for the control and development of the river in the country.

Besides the Government of India, States namely Punjab, Uttar Pradesh, West Bengal, Madras, Hyderabad and Mysore also maintain research stations.

Irrigational Research—Great strides in irrigation (including hydraulic) research have been made in India within the last 35 years. Some of this has been *ad hoc;* but substantial advance has been made through organised research.

The first in the field was Bombay where a special Research Division was created in 1916 to investigate local problems on land, drainage and reclamation. In 1920 a hydro-dynamic research station was opened on a small distributary near Poona. By 1925 the activities of the Research Station had developed beyond belief and the water supply available for model work was found to be inadequate. The station was consequently moved to Khadakvasla below the Khadakvasla Dam. After 1945 the activities of the Central Research Station at Khadakvasla multiplied and problems were referred to it from all parts of the country. Researches here relate to river training, the design of channels and hydraulic works, navigation, soil and agricultural problems.

After Bombay, came the Punjab, where the danger of water-logging and deterioration of land by salts became alarming. Investigations were started in 1925 and a hydraulic laboratory came into being at Lahore, but was lost to India by partition in 1947. A new Research Institute was set up with headquarters at Amritsar. The new Institute has made rapid advances and has been mainly concerned with problems relating to the Bhakra-Nangal Project. The Irrigation Research Station in Uttar Pradesh was established in 1930 at Lucknow but has since moved to Roorkee. Investigations have been carried out on calibration of flumes and falls, the study of non-silting distributary heads, fluming of structures, water requirements of crops, earth dam construction, river training and sub-soil supplies available in different doabs in the western districts of Uttar Pradesh. In

1931 the Central Board of Irrigation was set up to coordinate research work. The Board maintains one of the finest libraries on irrigation, hydro-electric and other subjects where enquiries from engineers in India and abroad are dealt with. The River Research Institute of West Bengal was set up in 1943 and comprises the River Model Station at Galsi, Tidal Model Station at Belgharia, the Soil Mechanics Laboratory at Russa and the Statistical Laboratory at Anderson House, Alipore.

The Krishnarajasagar Research Station at Mysore was established in 1945 immediately below the Krishnarajasagar Dam on the Cauvery. Important experiments on various aspects of the design of the volute siphon continue to be conducted at this Station in addition to other hydraulic experiments. The Hyderabad Engineering Research Department, the Irrigation Research Station, Poondi, Madras State, the Soil Engineering Research Station, Chepauk, Madras, the Concrete Laboratory, Chepauk, Madras, the Hirakud Research Station (Orissa) have all been established in the course of the last decade.

Main Types of Irrigation—(1) *Canal Irrigation*—This is the most important type of irrigation. Canals draw their waters from rivers or from artificial storage. They are mostly seen in Northern India. The river canals are of three classes—*Inundation canals, Perennial canals* and *Storage canals.* Inundation canals obtain water when the river is flooded and rises about a certain level. The Perennial canals are built by erecting some form of barrage across a river which flows throughout the year and diverting its water through a canal to the country to be irrigated. These canals are found in Uttar Pradesh and Punjab. Storage canals are built by constructing a dam across a valley to store the rain water during the monsoons. The water so held is later distributed to lands by means of canals drawn from the storage. These works are found in the Deccan, M. P. and Bundelkhand.

(2) The rest of the irrigation is done through tanks, surface percolation wells, tube wells etc. The term *minor,* applies to this type of irrigation.

(*a*) *Surface percolation wells* exist all over the country. It may well be said that the highest source of minor irrigation is the surface percolation wells.

(*b*) *Tanks and Reservoirs.* The water collects either in natural depressions, on the beds of streams are dammed up and shallow basins created for storing water. It is estimated that nearly 8 million acres of land are irrigated annually by means of tanks.

(*c*) *Flood irrigation and inundation irrigation* are the other sources of minor irrigation in India. The monsoon flood water of rivers diverted to lands which are above the level of the ordinary supply in a river. The flood water soaks the lands and the moisture retained in the soil allows the cultivation of a winter season crop, which otherwise would not be possible.

(*d*) *Tube wells*—This means lifting of water from underground by means of mechanical pumps. This process helps to utilise the sub-soil water resources of the country, particularly in the alluvial plains of the Indo-Gangetic basin.

The irrigation is again divided in three classes by Government—

(1) *Productive*—the capital for the construction and extension of this class is provided out of borrowed money or by appropriation from Famine Insurance grant and which is expected to yield within ten years of their

completion sufficient revenue to pay their working expenses as well as the interest on the capital expended on their construction.

(2) *Protective*—These are constructed as protection against famine and the cost of construction is provided out of current revenues or by appropriation from famine insurance grant.

(3) *Minor*—The works are of various kinds and included mostly tanks. They are financed out of current revenues.

Planning Commission—The Planning Commission had drawn a fifteen-year plan for the development of irrigation and power in India, envisaging an expenditure of Rs. 1,900 crores and suggesting ways and means to implement it.

The completion of the plan and the irrigation and power schemes already under execution will, it is estimated, provide irrigation facilities for an addition area of 42 million acres, and the additional food supply is likely to be of the order of fourteen million tons. They are expected to provide, besides, hydro-electric generating capacity of about seven million kilowatts.

There are at present 135 schemes costing in all Rs. 590 crores under construction in different parts of the country. The Commission expects that these schemes will take six to ten years to be completed and will bring ultimately 12·9 million acres of fresh land under irrigation, with an additional yield of 4·3 million tons of foodgrains and produce about two million kilowatts of power.

In addition to the schemes in progress, there are a number of other projects, about 122 in all, which are under various stages of investigation. They are expected to cost Rs. 1,300 crores.

The following are other recommendations of the Planning Commission—(1) a very high priority should be given to irrigation and connected power projects. (2) Every state government should prepare a fifteen year plan for completion of all projects. (3) Central and State Governments should be able to set up collectively Rs. 100 crores a year for the next fifteen years. (4) Commission suggests the creation of an *Irrigation Development Ways & Means Fund* by each State Government, into which definite sum of money could be paid every year either from general revenue, or loans or savings and grants from Central Government.

Projects in operation and investigation—At present there are 135 projects under execution in different parts of the country. In addition there are 122 others on which preliminary investigations are either in progress or have been completed, but these cannot be taken in hand for want of funds. Together, the 257 projects are expected to cost the country Rs. 1,900 crores of the 135 projects under execution, 11 are multi-purpose, 60 purely irrigation and 64 purely power projects. Twelve out of these 135 may be classified as 'major' projects costing more than Rs. 10 crores each. Eight of the 'major' projects are multi-purpose in their scope, three are power schemes and one an irrigation scheme. The remaining 123 projects together, are estimated to cost Rs. 151 crores, thus bringing the aggregate cost of the 135 projects under execution to Rs. 590 crores. The below summarizes some of the benefits which are expected from 135 projects from year to years.

	Addl. irrigation (million of acres)	*Addl. food* (million tons)	*Addl. power installed* (k.w.)
1951-52	0·6	0·2	..
1952-53	1·1	0·4	351,000
1953-54	2·0	0·7	554,000
1954-55	4·3	1·4	596,000
1955-56	5·5	1·8	636,000
1956-57	6·7	2·2	708,000

	Addl. irrigation (million of acres)	*Addl. food* (million tons)	*Addl. power installed* (k.w.)
1957-58	7·5	2·5	791,000
1958-59	8·5	2·8	817,000
1959-60	9·2	3·1	910,000
Ultimate	12·9	4·3	1,996,000

CANALS AND DAMS OF INDIA

Dams in India—The most important dam in India is the *Mathur Dam*. This Dam is situated in the Salem district, 30 miles away from Salem and has an impounding capacity of 93,500 million cu. ft. of water above the sluices and a water-spread of about 55 sq. miles. It has 14 low level sluices and 24 supply sluices. The total cubical contents of the dam is 54·6 million cu. ft.

Canal System—Indian canal system is by far the largest in the world. Irrigation canal systems are of two kinds, *inundation* canals and *perennial* canals. Inundation canals are those drawing supplies though cuts in the river bank. They only flow during floods, when the river level is high. Perennial canals have head weirs across the river at the starting point of the irrigation system which controls the river flow and directs the water supplies into the canal throughout the year. Both systems have been in use in India for a very long time. The *Grand Anicut* in South India which is estimated to date from the 2nd century A.D. and which irrigates 200,000 acres is of the later type. The Great Canal System of U.P. and Punjab are of this type.

Following are the main canals and dams of India:—

PUNJAB

1. *Western Jamuna Canal* irrigates the districts of Rohtak and Hissar, States of Patiala and Jhind.
2. *Sirhind Canal* takes water from Sutlej River and irrigates Ludhiana, Ferozpur, Hissar and Nabha.
3. *Upper Bari-Doab Canal* takes from Ravi River and irrigates Gurdaspur, Amritsar and Lahore. Its main lines are 324 miles long.
4. *Lower Chenab Canal* is the greatest canal in India and takes water from Chenab and irrigates Lyallpur.
5. *Lower Jhelum Canal*—irrigates lands in the North-west Punjab.
6. *Upper Chenab*—Lower Bari-Doab Canal.

UTTAR PRADESH

1. *Upper and Lower Ganges Canals* irrigate the doab between Ganges and Jamna. The Upper Ganges Canal starts from the head works near

Hardwar and crosses the Solanki River by the biggest aquaduct in India near Roorkee. The Lower Ganges Canal takes off at Narora and joins the tail end of the Upper Ganges Canal. The two together irrigate 2½ million acres and contain 7,500 miles of channels, forming the biggest system in India.

2. *Agra Canal* is taken off from Jumna near Delhi and irrigates Mathura and Agra districts.

3. *Sarda Canal* takes off from Sarda river on the borders of Nepal in the north of U. P. and irrigates Rohilkhand and Western parts of Oudh. It commands some 7 million acres in Oudh and Rohinkhand. It has 4,177 miles of main canal distributaries and is the longest canal in the world. In addition some 1,500 miles of drainage channels were constructed to carry off rain-water quickly. Cost of the scheme was £7,500,000.

4. *Eastern Jumna Canal* irrigates north-eastern parts of the province. The canal takes the water from Jumna near Faizabad. Irrigates 400,000 acres.

5. *Trans-Jumna Protective Canals*—were built as protective measures to cope with famines.

MADRAS

Madras—Cauvery-Mattur Project, Godavari Delta System, Kistna Delta System, Cauvery Delta System, Pennar River Canals System, Periyar System, Chicacole Minor River System, Lower Coleroon Anicut System, Tungavadra Project has been inaugurated in 1945.

WEST BENGAL

West Bengal has two small canals—*Damodar Canal* and *Eden Canal,* which together irrigate 186,000 acres.

PRINCIPAL MULTI-PURPOSE PROJECTS

Bhakra-Nagal Project—in the Punjab envisages the construction of a 680 ft. high dam across the Sutlej near Bhakra, about fifty miles above Rupar town in Ambala district. About eighty miles below this down stream from Bhakra dam, Nagal dam, ninety feet high is nearing completion. There will be three power houses on the Nagal canal. The dams will irrigate an area of 3·6 million acres, which is expected to yield 130,000 tons of additional food grains and 800,000 bales of cotton. The project provides for the generation of 400,000 kw. of power which will serve the Punjab, PEPSU, Rajasthan, Delhi and Uttar Pradesh. This project comprises the highest straight gravity dam in the world (680 ft. high).

The Hirakud Project—in Orissa is the first of a chain of three dams planned for harnessing of the Mahanadi. The project comprises the construction of a dam across the Mahanadi about nine miles upstream of Sambalpur. It provides for irrigation of 1,100,000 acres beginning in 1953-54. When fully developed, the project will yield 340,000 tons of food grains and 34,000 tons of cash crops such as sugar cane and cotton, and supply 321,000 kw. of power. This power will work the furnaces and rolling mills of Jamshedpur.

Damadar Valley Project—is modelled on the famous Tennessee Valley Authority in the U.S.A. and will greatly benefit the States of West Bengal and Bihar. The scheme comprises eight storage dams with hydro-electric stations, two auxiliary plants with an installed capacity of 240,000 kw. and an additional thermal power station at Bokaro with an installed capacity of 200,000 kw. The building of Bokaro Thermal power station is nearing completion. The Konar dam is expected to be ready in June 1952 and Tilya dam by the following December. The project will ultimately control the flooding of the Damodar which is notorious for its vagaries and destructiveness. Other important benefits will be irrigation facilities for 1,000,000 acres of land, ample electric power and chief water transport.

Tungabhadra Project—which will serve Madras and Hyderabad, envisages a dam across the Tungabhadra near Mallapuram, three miles above Hospet; in Bellary District. There will be two canals—one will irrigate 300,000 acres in Madras and the other will irrigate 419,000 acres in Hyderabad. The project will generate 155,000 kw. of electricity and help in the additional production of 210,000 tons of food grains.

Machkund Hydro-Electric Scheme—will harness the waters of the Machkund which forms the boundary between Madras and Orissa and will be administered by the two States. The power site is at Duduma Falls, about 125 miles from Visakhapatnam by road. The power house will have three generating units to begin with, each capable of producing 17,350 kw. of electricity.

Kakrapara Project—in Bombay State consists of a dam across the Tapti at Kakrapara, fifty miles above Surat. It provides for a canal on either bank of the river. The irrigation of 562,520 acres and generation of 48,000 kw. will be chief benefits accruing from it. The additional food production resulting from the scheme will be 166,000 tons.

Mayurakshi Reservoir Project—aims at irrigating about six hundred thousand acres in Birbhum area including adjoining areas of the district of Murshidabad and a small area of the district of Burdwan. The project consists of two parts. Part I—the storage dam and reservoir at Messanjore in the Santhal Parganas in Bihar. Part II—barrage and canal system in Birbhum district. The first part provides for the construction across river Mayurakshi at Messanjore a masonry dam of height 136 ft. above the deep foundations. The second part provides for the construction of main barrage across the river Mayurakshi near Suri in the Birbhum district and an elaborate canal system to irrigate the 6 lac acres.

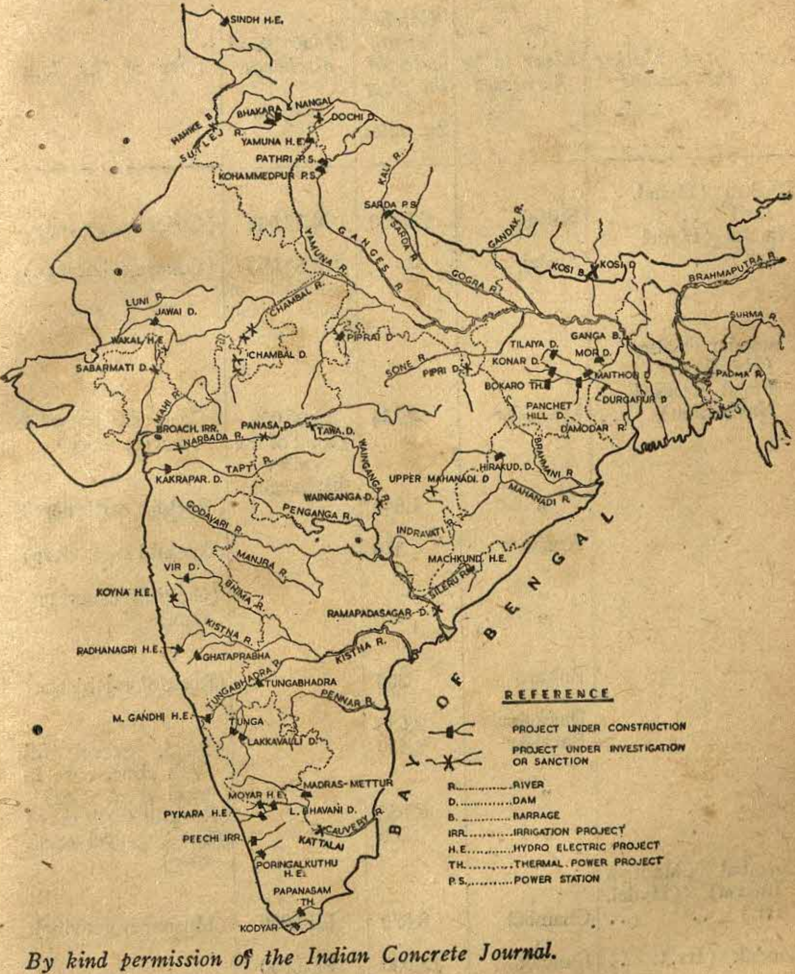
Kistna Pennar Project—The project aims at harnessing the waters of the great Kistna river draining 80,000 sq. miles to irrigate a little over 4·2 million acres of the first and second crops in the Rayalaseema and in some of the coastal districts of Madras State. It is also proposed to develop power of about 250,000 kw. firm and seasonal.

Lower Bhavani Project—This project is for the construction of a dam across Bhavani, a tributary of the Cauvery taking its rise in the slopes of the Western Ghats in the Nilgiris and Malabar districts of Madras State.

Ramapadasagar Project—consists of (*a*) a dam 428 ft. high across Gadavari river, (*b*) two canals taking off an either flank of the dam—one extending upto Vizagapatam port and the other extending upto Kristna river in the adjacent valley and even beyond into the Guntur district upto the Gundalakama river, (*c*) a hydro-electric generator station at the right flank.

Other major schemes under execution are the *Sarda power project* in Uttar Pradesh, the *Chambal irrigation-cum-power project* in Madhya Bharat and Rajasthan, the *Lekkavali irrigation-cum-power project* in Mysore and the power projects in Madhya Bharat.

IRRIGATION & POWER PROJECTS



By kind permission of the Indian Concrete Journal.

Important Hydro-Electric and

SCHEME		HYDROLOGY		DAM
Name and Nature of the scheme	*River to be harnessed*	*Catchment area of the river* Sq. miles	*Max. flood discharge* Cusecs.	*Type of the dam*
Bhakra (Hydel. Irr.)	Sutlej	22,000	4,32,000	(Concrete gravity)
Nangal (Hydel Irr.)	Sutlej	—	3,50,000	(Concrete barrage)
Damodar Valley (Hydel. Irr. Flood Control Navigation) ..	Damodar	4,234	10,00,000 (total of the valley discharges)	(Composite gravel & concrete core)
	"	1,640		(Rockfill earth core)
	Konar	370		(Rockfill earth core)
	"	—		(Gantiko concrete dam)
	"	440		
	Bokaro	200		(Rockfill earth core)
	Damodar	2,630		
	Barakar	2,430		(Sand, gravel fill with conc. core in steel sheet piles)
	"	2,086		(Rockfill earth core)
	"	380		(Sand, gravel earth core)
Chambal (Madhya Bharat) (Hydel. Irr.)	Chambal	8,670	9,50,000	(Masonry gravity)
Gandak (Irr.) ..	Gandak	12,900	7,00,000	

Irrigation Projects in India

		IRRIGATION		POWER		COST
Height Ft.	*Length* Ft.	*Area proposed for irrigation* Acres (000)	*Length of main canals* Miles	*Power Firm and Seasonal* kw. (000)	*Area catered by the power station* Sq. miles	*Total estimated cost* Crores Rs.
510	1,300	60,00	200	4,00-F.	—	126
95	935	Waters fed to Bhakra main line canal	40			3·2
130-bed	8,900	10,00	1,550	40 "	16,000	68
250 "	21,120			45 "		
125 "	8,000			10 "		
—	—			6 "		
—	—			10 "		
160 "	3,200			3 "		
—	—			18 "		
160 "	3,200			40 "		
115 "	9,800			20 "		
100 "	1,000			6 "		
230	1,220	8,50	—	92 "		9·75
—	—	22,82	770	20 "	N.W. Bihar, Nepal	25

Important Hydro-Electric and

SCHEME		HYDROLOGY		DAM
Name and Nature of the scheme	*River to be harnessed*	*Catchment area of the river* Sq. miles	*Max. flood discharge* Cusecs.	*Type of the dam*
Godavary Valley (Multi-purpose)	Godavari	21,500	7,90,165	(Masonry gravity)
	Godavari	35,240	9,18,299	(Masonry gravity)
Godavary North Canal (Partial scheme under Godavary Valley project ..	Kaddam	1,000	2,27,000	(Gravity spill-way-composite flanks)
Kistna-Pennar (Hydel. Irr.) ..	Kistna	78,324	10,00,000	(Masonry gravity)
	Pennar	18,377	5,00,000	(Concrete gravity)
Kosi Valley (Hydel. Irr. Flood control) ..	Kosi	23,806	9,40,000	(Concrete gravity)
Koyna (Hydel. Irr.)	Koyna	334	1,75,000	do.
Lakkavalli (Hydel Irr.)	Bhadra	760	1,20,000	(Masonry gravity)
Lower Bhavani (Irr.)	Bhavani	1,612·5	1,11,217	(Earthen and Mas. spillway)
Mahanadi Valley (Multi-purpose)	Mahanadi	32,200	15,00,000	(Earth fill and concrete)

Irrigation Projects in India—(Contd.)

		IRRIGATION		POWER		COST
Height Ft.	*Length* Ft.	*Area proposed for irrigation* (000)	*Length of main canals* Miles	*Power Firm and Seasonal* kw. (000)	*Area catered by the power station* Sq. miles	*Total estimated cost*
95	—	28	35	—	—	98
76	—	11,31 S.C. 20,07 D.C.	315	1,20-F. 1,60-S. 1,50 —thermal	—	
101	6,116		79	—		—
221	2,745	30,00	810	1,20-F.	Ceded districts	80
260	2,250					
783	1,985	9,43	1,693	90-F. 45-S.	Linked to D. V. C.	177
382	3,300	37	—	7,20-F.	Sangli, Miraj and Sholapur districts	90
230	3,320	1,80	200	13-F.	Connected to Madras grid	20
160	29,000	2,07	120	—	—	10
160	15,703	8,75	238	3,21-F.	537	48

Important Hydro-Electric and

SCHEME		HYDROLOGY		DAM
Name and Nature of the scheme	*River to be harnessed*	*Catchment area of the river* Sq. miles	*Max. flood discharge* Cusecs.	*Type of the dam*
Mahatma Gandhi Hydel. (Hydel.)	Sharavati	581	2,00,000	(Earthen and Mas. gravity)
Malampuzha (Irr.)	Malampuzha	57	30,000	(Masonry gravity)
Manimuthar (Irr.)	Manimuthar	60·7	60,000	(Masonry gravity)
Mor (Hydel. Irr.)	Mayurakshi	718	3,00,000	(Masonry gravity)
Moyar (Hydel.) ..	Pykara-tailrace	50	450	(Masonry gravity)
Muchkund (Hydel)	Muchkund	858	1,85,000	(Masonry gravity)
Narbada Hydel. Irr.)	Narbada	—		— —
Tapti Valley (Flood Control Navigation) ..	Tapti	25,000	13,50,000	(Earthen)
Nayar (Multi-purpose) ..	Nayar	720	1,68,500	(Concrete gravity)
	Nayar	32	5,550	(Concrete gravity)
Pallivasal (Hydel.)	Muthirapuzha	39	17,000	(Concrete gravity)

Irrigation Projects in India—(Contd.)

		IRRIGATION		POWER		COST
Height Ft.	*Length* Ft.	*Area proposed for irrigation* Acres (000)	*Length of main canals* Miles	*Power Firm and Seasonal* kw. (000)	*Area catered by the power station* Sq. miles	*Total estimated cost* Crores Rs.
104	3,870	—	3·25 Power Channel	1,20-F.	Mysore, Madras, Bombay	7·74
127	4,700	51	20	—	—	3·8
145	12,000	1,03	29·5	—	—	3·98
153	2,170	5,95	225	2-F. 4-S.	To be connected to D.V.C. grid	15
60	900	—	5·5	36-F.	To be connected to Pykara & Mettur	3·64
42	2,600		Power Canals			
154	1,300	—	1·5	1,08-F.	Andhra districts	9·3
80	1,033	—	Power Canals			
199	42,240	5,60	100	2,24-F.	Bet. Bom- Bombay & Ahmedabad	38
655	1,500	2,37	—	46,20-F. K.W.H. yearly	—	33
220	550					
282	805	—	—	36-F.	Travancore, Cochin	2·2

Important Hydro-Electric and

SCHEME		HYDROLOGY		DAM
Name and Nature of the scheme	*River to be harnessed*	*Catchment area of the river* Sq. miles	*Max. flood discharge* Cusecs.	*Type of the dam*
Poringalkuthu (Hydel. Irr.) ..	Chalakudi	370	80,000	(Concrete gravity)
Ramganga (Multi-purpose) ..	Ramganga	1,200	2,50,000	(Rock-earth fill)
Rampadsagar (Hydel. Irr.) ..	Godavari	1,21,500	21,00,000	(Concrete gravity)
Rihand (Multi-purpose) ..	Rihand	5,148	7,90,000	(Concrete gravity)
Sengulam (Hydel.)	Muthirapuzha tailrace	—	—	(Gravity)
Tungabhadra (Hydel. Irr.) ..	Tunga bhadra	10,880	6,50,000	(Masonry gravity)

Irrigation Projects in India—(Concld.)

		IRRIGATION		POWER		COST
Height Ft.	*Length* Ft.	*Area proposed for irrigation* Acres (000)	*Length of main canals*	*Power Firm and Seasonal* kw. (000)	*Area catered by the power station* Sq. miles	*Total estimated cost* Crores Rs.
86 (above bed)	1,200	10	—	64-F.	Travancore, Cochin	2·6
330 (above bed)	1,820	11,83	200	50-F.	North U.P.	25·82
428	6,600	27,50	343	1,50-F.	To be delivered to Madras grid	130
291	3,000	23,84	—	900×10^6 k.w.h. yearly	U.P., Bihar and part of C.I.	31·4
75	350	—	—	48-F.	Travancore, Cochin	2·69
160	8,000	8,00	400	1,95-F.	Ceded districts, Richur & Gulbarga	50

LABOUR IN INDIA

Labour Reform in India —Indian Government's effort to afford protection to labour had a strange origin. Legislation prior to 1818 attempted merely to regulate conditions of labour so as to help the employers and to ensure that they had a docile labour force at their disposal. The Factory Acts of 1818 and 1891 were passed chiefly because of the anxiety caused to Lancashire by the growing cotton industry of Bombay.

For 20 years after 1891, there was no further advance. In 1911, new Factories Act was passed restricting the hours of work in textile factories to 12.

The period after World War I was an era of progressive labour legislation. The Trade Union movement was born and India's association with I.L.O. supplied a powerful urge in favour of humane conditions in mines, factories and mills. In 1922 the Indian Factories Act was amended so as to embrace many more factories and working hours were reduced to a maximum of 11 hours per day. The Mines Act was similary amended in 1923 providing for limitation of hours to 60 per week aboveground and to 24 per week below ground. It also prohibited employment in mines persons under 13 years of age. A Workman's Compensation Act providing for accidents sustained or disease contracted by workmen was also passed in 1923. Government's anxiety to preserve industrial peace led also to the enactment of Indian Trade Union Act, 1926 as well as Trade Disputes Act, 1929.

The post-war depression and the resultant industrial unrest paved the way for Government taking a deeper interest in labour problem. A *Royal Commission on Labour* in India was appointed in 1929 under the presidency of Rt. Hon. J. H. Whitley.

Between 1931 and the advent a provincial autonomy in 1937, the Central Government effected a number of reforms revising or enacting legislation regarding factory works, miners, plantation labour, railway-men, maritime workers, dock labourers, etc. in the light of the recommendation of Royal Commission on Labour. Perhaps the most advanced social legislation of this period was the enactment of the *Payment of Wages Act* in 1936.

Quickened interest in labour reform was shown by new autonomous provincial governments which came into being in 1937 and which instituted a number of enquiries and enacted a series of legislative measures for amelioration of the working classes. But when the Congress Governments resigned in 1939, there was an end to this progress in the provinces. War years 1939-45 was a remarkable expansion of Indian industries and unparalled rise in employment. At the same time, industrial relations were subjected to increasing strain. There were numerous struggles in respect of wages, dearness allowance, bonus and sharing of war profits. Direct action was resorted by workers all over the country. End of the war brought futher increase in the number of disputes. Inflation and scarcity of foodstuffs, cloth and other consumer goods, the bleak prospect of unemployment owing to demobilization and retrenchment helped to strain the feelings between employers and employed. Added to these, is the new-born political consciousness among the workers.

With the advent of new-born independence, the labour unrest was greatly intensified and the National Government began to overhaul the entire machinery of labour, so as to stabilize industrial tranquility. The Government's statement on industrial policy made in Parliament on April 8, 1948 recognised "the proper role of labour in industry and the need to secure for labour fair wages and working conditions." It urged that "Labour for its part must give equal recognition to its duty in contributing to the increase in the national income without which a permanent rise in the standard of living cannot be achieved." With this object, they also undertook series of legislations and various methods.

LABOUR LAWS

The Labour Legislation can be divided into following heads :— (1) *Factories,* (2) *Mines,* (3) *Plantations,* (4) *Transport,* (5) *Legislation relating to workers in shops and commercial establishments,* (6) *Safety and Welfare,* (7) *Wages,* (8) *Social Security,,* (9) *Industrial Relations,* (10) *Miscellaneous.*

1. **Factories** –All the Factories Acts from 1881 to 1947 have been annulled and a new act called the Indian Factories Act of 1948 has been passed. The main provision of the Act are as follows :—(1) It covers all industrial establishments employing 10 or more workers where power is used and 20 or more workers where power is not used. (2) It does away with the distinction between seasonal and perennial factories. (3) Elaborate provision have now been made which specify in clear and precise terms the requirements in regard to health, safety and welfare. (4) The minimum age for employment of children has been fixed at 14 and the upper age-limits of the adolescents have been raised from 17 to 18. (5) The hours of works for adults have been fixed at 48 hours a week and 9 hours a day. The spread-over has been fixed at 10½ hours in a day. (6) For children and adolescents, the hours of work are 4½ hours a day and the spread over has been fixed at 5 hours. (7) No adult worker is allowed to work more than 5 hours unless he has had an interval for rest of at least half-an-hour. (8) Employment of children and women between 7 p.m. and 6 p.m. is prohibited. (9) For overtime work the Act provides that employers shall be paid twice their normal rates of wages. (10) Besides weekly holidays, every worker is entitled to leave with wages after 12 months' continuous service at the followin rate—Adult : one day for every 20 days of work, subject to a minimum of 10 days. Children : one day for every 15 days of work, subject to a minimum of 14 days.

2. **Mines** —It was in the year 1901 that first Indian Mines Act was passed. It was radically altered in 1935 as a result of the recommendation of the Royal Commission on Labour in India and the adoptation of the draft International Labour Convention on hours of work in coal mines. Since 1935 further change in the Act have been made by the amending Acts of 1936, 1937, 1940 and 1946. The main provisions of the Act are as follows :—(*a*) The Act applies to all mines. A mine has been defined as "any excavation where operation for the purpose of searching for or obtaining minerals has been or is being carried on." (*b*) Hours of work for persons employed on the surface are fixed at 10 hours a day with a maximum spread over of 12 hours including an interval of rest of one hour after six hour's work. The daily hours of work and spreadover for person below ground have been fixed at nine. (*c*) The weekly hours of work for all employees are fifty-four. (*d*) No person is allowed to work in a mine for more than 6 days in a week ;

(*e*) the Act prohibits the employment of children below the age of 15 and no person below the age of 17 shall be allowed to work in the underground unless he has been certified to be medically fit.

3. Plantations—The first legislation regarding plantation labour is the *Tea Districts Emigrant Labour Act XXI of 1932.* The Act deals mainly with me recruitment of workers for the gardens in Assam. The main provisions are—(1) Every emigrant labourer and his family have a right of repatriation at the cost of the employer after the expiry of three years. (2) Provincial governments are empowered to declare any area to be controlled emigration area. (3) Appointment of a Controller of Emigrant Labour. (4) No children below 16 years can proceed to Assam unless accompanied by parents or relatives or in case of married woman unless accompanied by her husband. *Plantation Labour Act of 1951* applies to all tea, rubber and chinchona plantations for health, welfare, hours and limitations of employment.

4. Transport—Chapter VI (*a*) of the *Indian Railways Act* 1890 as amended in 1930 deals with the question of hours of work and periods of rest of almost all railway employees except those covered by the Factories Act and the Mines Act. Workers covered by the Indian Railways Act are classified into two categories, namely continuous workers and essentially intermittant workers. The administration of the Act since 1946 has been the responsibility of the Chief Labour Commissioner (Central) and the Regional Labour Commissioners of the three zones into which the Dominion of India has been divided. The other important act regarding transport is *Indian Merchant Shipping Act of* 1923. The conditions of employment of Indian seamen are regulated by the provision of the Indian Merchant Shipping Act.

Another important Act is the *Dock Workers (Regulation of Employment) Act of* 1949 with a view to eliminating the hardship caused to dock workers on account of casual nature of their employment. It empowers the Central Government in the case of major ports and Provincial Governments in respect of other ports to farme a scheme for the registration of dock workers with a view to ensuring greater regularity of employment and for regulating the employment of dock workers, whether registered or not and terms and conditions of such employment in any port.

5. Legislation relating to workers in Shops and Commercial Establishments—Granting of protection to workers in shops and commercial establishments was first taken by the Government of Bombay which passed an Act in 1939. Other Provinces such as Bengal and Punjab followed suit and passed similar Acts in 1940. The Punjab Act was extended to Delhi in 1942. During 1947 acts on the subject were passed by three more provinces, namely Madhya Pradesh, Uttar Pradesh and Madras. In Assam a Shops and Establishments Act was passed in 1948. Apart from these provincial Acts three is a Central Act known as *Weekly Holidays Act,* 1942. This Act is permissive in character and provides for the grant of weekly holidays to shopworkers in those provinces which have no legislation on the subject. All the above Acts fix the daily and weekly hours of work. The Acts also fix the holidays and leave. With the exception of Bengal Act, all other Acts have placed restrictions on the employment of children and have made special provisions relating to hours of work rest intervals etc. of young persons. All the Acts contain provisions for regulating the payment of wages.

6. Safety and Welfare—(1) *Indian Dock Labourer's Act 1934 came* into force in 1948. The Act is concerned with the protection against accidents of workers employed in loading and unloading of ships. (2) *The Coal Mines Safety (Stowing) Act of 1939* provides for the creation of a fund to assist stowing measures. According to the Act the expenses of the Fund are to be met by an excise duty and its administration is entrusted to a Coal Mines Stowing Board consisting of six persons. The Act empowers Chief Inspector and Inspectors of Mines to require the owner, agent or manager to take such protective measures including stowing as the Chief Inspector or Inspectors may think necessary. (3) *Coal Mines Labour Welfare Fund Act 1947* is designed to make better provision for financing measure for promoting the welfare of labour employed in coal mining industry. It provides *inter alia* for the setting up of a fund to be called the Coal Mines Labour Housing and General Welfare Fund which will maintain two accounts, namely the Housing Account and the General Welfare Account. (4) *Mica Mines Labour Welfare Fund, 1946* provides for the raising of a Fund by the levy of an *ad valorem custom duty* on all mica exported from the Indian Dominion. The fund is to be used for expenditure incurred in connection with measures which are necessary or expedient to promote the welfare of labour employed in the mica mining industry.

The Welfare Schemes so far carried out as follows—(1) construction of pithead baths in coal mines, (2) welfare centres for women where lessons in knitting, sewing, spinning, domestic economy etc., are imparted, (3) creaches have been provided in some coal mines. (4) Regional hospitals have been started in some cases. (5) Adult education centres opened in coal-mines.

7. Wages—Prior to 1936 there was no law in the country with the exception of the *Employers and Workman (Disputes) Act of 1860* to regulate the payment of wages to workers. Largely as a result of the recommendations of the Royal Commission on Labour in India, an Act known as the *Payment of Wages Act (IV of 1936)* was passed in 1936. The main provisions of the Act are as follows:—(1) it applies only to wages and salaries which average below Rs. 200 per month employed in any factory and upon any railway. (2) No wage period shall exceed one month. (3) Undertakings employing less than 1,000 persons must pay wages before the expiry of the 7th day and in other cases before the expiry of the 10th day after the wage period. (4) Maximum amount deducted as fines is not to exceed in any month half an anna in the rupee of the worker's earnings. (5) The Act empowers to withhold wages in case of stay-in-strike.

The first step in the direction of fixing minimum wages was taken by the Act known as the *Minimum Wages Act of 1948* to provide for the fixation of a minimum time rate and a minimum piece rate. The Act requires the Central or Provincial Governments to fix within specified period minimum rates of wages payable to employees employed in industries specified in the schedule appended to the Act. However minimum rates of wages need not be fixed in respect of any employment in which there are in the whole province less than 1,000 employees. The Act provides for the fixation of a (*a*) a minimum time rate, (*b*) a minimum piece rate, (*c*) a guaranteed time rate and (*d*) an overtime rate appropriate to different occupations, localities or classes of work etc.

An act has been passed in 1950 known as *Fair Wages Act* to fix fair wages for workers employed in the first instance in factories and mines. The fair wages will, so long as the cost of living index number exceed a slab of 185 to 200 (the cost of living index number of 1939 being taken as 100), consist of a basic rate and a cost of living allowance. The latter is to be adjusted according to such graduated scales as may be prescribed by the appropriate state government. The employer shall in no circumstances pay his employees a wages less than the minimum wage prescribed therein, irrespective of the capacity of the industries or the unit.

8. Social Security—*The Workmen's Compensation Act* passed in 1924 was the most important piece of Social Insurance legislation in India. Compensation is payable by the employer in the case of injury caused by accident arising out of and in the course of employment. It is however, not payable if the incapacity does not last for more than 7 days or if injury, not resulting in death, is caused by the fault of the worker, *i.e.*, due to influence of drink, drugs, wilful disobedience of an order etc. Besides bodily injury, compensation is also payable in the case of certain occupational diseases mentioned in Schedule III to the Act.

The Employees State Insurance Act of 1948 applies in the first instance, to all factories other than seasonal factories but contains provisions that it can be extended partially or wholly to any establishment or class of establishments. It covers labour employed directly or indirectly and also clerical staff. It does not however apply to a member of the armed forces or to a person whose remuneration in the aggregate exceeds of Rs. 400 a month. The administration of the Insurance scheme has been entrusted to Employee's State Insurance Corporation. The scheme is financed by the Employee's State Insurance Fund which consists of contribution from employees and grants, donations and gifts from the Central and State Governments. The contributions in respect of an employee are payable by the employee and by his employer. The benefits provide under the Act are—sickness benefit, maternity benefit, disablement benefit, dependent's benefit and medical benefit.

Employees Insurance Courts are to be established under the Act to deal with questions and disputes relating to such matters as rates of contribution, liability to pay contributions, right to receive benefit, amount and duration of benefit etc., and also to decide claim.

Coal Mines Provident Fund and Bonus Schemes Act of 1948 empowers the Central Government to frame a Provident Fund Scheme and a Bonus Scheme for employees in coal mines. The Act lays down that the amount of Provident Fund standing to the credit of any member shall not be assigned or changed or shall not be liable to attachment. Coal Mines Bonus Scheme entitles every employee in the coal mines, subject to certain conditions, to a bonus under the scheme.

Maternity Benefit Acts have been passed by the different provinces such as Bombay in 1929 C.P. in 1930, Madras in 1934, U.P., in 1938, Bengal in 1939, Punjab in 1943, Assam in 1944 and Bihar in 1947.

The Central Act regarding maternity welfare is the *Mines Maternity Benefit Act of 1941.* It applies to women employed in mines covered by the Indian Mines Act.

9. Industrial Relations—The main Act regarding the industrial relations is the *Indian Trade Union Act of 1926.* The main provisions of the Act are (*a*) Any seven members of a trade union can apply for registration and can be granted a certificate. At least half of the total number of its office-bearers must be persons actually engaged in the industry to which the Union belongs. (*b*) Office and members of a registered trade union are given protection against criminal proceedings in respect of any agreement for the purpose of furtherance of any legal object of the union. (*c*) Registered trade unions are required to submit annual returns to the employers. The Trade Union Act has been amended in 1951, the main provisions of it relate to the recognition of trade union, compulsory recognition of them on the fulfilment of certain conditions, establishment of labour courts, right of the trade unions to negotiate with employers. The second important Act under the industrial relations is the *Industrial Employment (Standing Orders) Act of 1946.* This Act extends to the whole of India and applies to all industrial establishments employing 100 or more persons. Under the Act every employer is required to submit to the certifying officer, five copies of the draft standing orders which he proposes to adopt along with the prescribed particulars regarding the workmen employed and the name of the trade union to which they belong. These orders are required to provide for certain matters laid down in the schedule of the Act.

The most important in this category is the *Industrial Disputes Act, 1947* which came into force on 1st April, 1947 and extends to the whole of India. The "appropriate Government" under this Act means the Central Government in case of such industrial disputes as concern industries run by the Central Government or by any Federal Authority or mines, oilfields and major ports and the Provincial Government in case of other industries. For maintaining harmonious relations between employers and workers and for bringing about conciliation or settlement of disputes, the Act provides for the following authorities and procedure—

(1) *Works Committees*—These joint committees of employers and workers giving equal representation to both the parties, are set up in industrial establishments employing one hundred or more workmen. The duty of the Committee is to promote measures for securing and preserving unity and good relations between employers and workmen. With this aim they will consider matters of common interest and try to compose any material difference of opinion.

(2) *Conciliation Officers*—These officers are appointed to mediate in and promote the settlement of industrial disputes.

(3) *Boards of Conciliation*—The Boards have practically the same duty as the Conciliation Officers *i.e.,* to promote settlement of industrial disputes but are set up by the appropriate Government as occasion arises or after the Conciliation Officers have failed to bring about a settlement.

(4) *Courts of Enquiry*—The Courts of Enquiry are set up as the occasion arises for enquiring into any matter connected with or relevant to an industrial disputes. They may consist of only one independent person or of a number of independent persons with a Chairman.

(5) *Industrial Tribunals*—These are constituted by the appropriate Government for adjudication of industrial disputes and consist of such number of members as the Government may consider appropriate. Every member of the Tribunal must be an independent person of the status or competence of a High Court or District Judge.

If any industrial dispute exists or is apprehended, the appropriate government may refer the dispute too a Board for settlement or to a Court of Enquiry for investigation of any matter or to a Tribunal for adjudication. In two cases, the Government *shall* so refer the dispute (*i*) if the dispute concerns a public utility service and notice of strike has been given and (*ii*) where the parties to an industrial dispute representing the majority of each party apply for reference of the dispute to a Board, Court or Tribunal. After the dispute has been referred to a Board or Tribunal, the Government may order the discontinuance of any strike or lockout in connection with such dispute which may have been in existence on the date of reference.

Any strike or lockout in a public utility service is illegal, if it is commenced or declared without giving to employer or employee a notice of strike or lockout within six weeks before striking or declaring a lockout. Any strike or lockout is illegal if commenced or declared during the pendency of (1) conciliation proceedings before a Board and seven days after the conclusion of such proceedings. (2) Proceedings before a Tribunal and two months after the conclusion of such proceedings or (3) during any period in which a settlement or award is in operation in respect of any of the matters covered by the settlement or award.

The working of *Industrial Disputes Act* revealed that piece-meal adjudication in disputes relating to concerns having branches in more than one State by Tribunals appointed by State governments created considerable difficulties for the employers. Lack of uniformity in awards in such disputes created discontent among the employees. This become specially apparent in the case of banking and insurance companies. To remedy this defect. *Industrial Disputes (Banking and Insurance Companies) Ordinance 1949* was promulgated. The ordinance prohibits State governments from referring any industrial dispute concerning banking and insurance companies which have their branches or other establishments in more than one State for adjudication, enquiry or settlement and provides abatement of proceedings relating to such disputes pending before State tribunals. Under the ordinance the Central Government constituted an Industrial Tribunal in June 1949 for adjudication of industrial disputes in banking companies. The ordinance has since been replaced by an Act.

In June 1949 Governor-General promulgated another Ordinance called *Industrial Tribunal Payment of Bonus (National Savings Certificates) Ordinance 1949*—The Ordinance declares that notwithstanding anything contained in Payment of Wages Act or other acts, it shall be lawful for any industrial tribunals to direct that any award that may be payable under the award shall, to the extent of any part thereof not exceeding one-half of the amount of bonus in any case be paid in the form of P.O. National Savings Certificate.

The three provincial Acts concerning the settlement of Industrial disputes are *Bombay Industrial Relations Act of 1946, Central Provinces and Berar Industrial Disputes Settlement Act, 1947,* and *United Provinces Industrial Disputes Act, 1947. Industrial Disputes (Madras Amendment) Act, 1949.*

10. Miscellaneous —(1) *The Children (Pledging of Labour) Act II of 1933* lays down that any agreement to pledge the labour of a child below fifteen years by the parent in return of any payment or benefit will be null and void and the parent is liable to be fined upto Rs. 50 and the employer upto Rs. 200. (2) *The Employment of Children Act XXVI of*

1938 prohibits the employment of children below the age of 15 in any occupation connected with the transport of passengers, goods or mails by railway or in any occupation involving the handling of goods within the limits of any port regulated by the Indian Ports Act 1908. No child who has not completed his 12th year can be employed in any of the scheduled occupations *i.e.,* bidi making, carpet making, cement manufacture, cloth printing, dyeing and weaving, manufacture of matches, explosives and fireworks, mica cutting and splitting, shellac manufacture, soap manufacture, tanning and wool cleaning. (3) The paucity of well-coordinated labour statistics in India has been the subject of adverse comment for a long time. So the *Industrial Statistics Act of 1942* was passed. The Act empowers the provincial governments to collect statistics on (*a*) any matter relating to factories and (*b*) price of commodities, attendance, living conditions, indebtedness, rents of dwelling houses, wages and other earning and provident and other funds, benefits and amenities, hours of work employment and unemployment, industrial and labour disputes. The Act empowers the Statistics Authority to call for required returns and examine the relevant records etc. and penalties have been provided for non-submission. (4) *Legislation relating to indebtedness* has been enacted from time to time deal with problems incidental to the indebtedness of industrial workers. The prominent of these are as follows—(*a*) C. P. Code of 1908 was amended in 1937 to provide for the exemption of attachments of salaries of all workers getting less than Rs. 100 per month and in the case of government employees the first Rs. 100 and the moiety of the remainder. It also limits the period of continuous attachment and provides that if a worker's salary has been attached for a period of 24 months, it should remain immune from liability of further attachment for a period of one year. (*b*) C. P. Code of 1908 was again amended in 1936 to prevent imprisonment of debtors. (*c*) Punjab Government has an Act known as *Punjab Relief of Indebtedness Act 1936.* (*d*) C. P. Government passed an Act known as the *Adjustment and Liquidation of Industrial Workers' Debt Act of 1936.* (*e*) Bengal Government passed an Act known as *Bengal Workmen's Protection Act of 1934* which provides that any person loitering at or near any factory, workshop etc. with a view to recovering debts from persons employed would be liable to fine or imprisonment (*f*) M. P. Government passed an Act called *C. P. Protection of Debtors' Act* which is more or less on the lines of Bengal Act. (*g*) Madras Government passed a similar legislation in 1941. (*h*) *Bihar Workman's Protection Act* was passed in 1948 to protect certain classes of workmen from the molestation and intimaidation by their creditors.

LABOUR ADMINISTRATION

Ministry of Labour, Government of India—Ministry of Labour as now constituted consists of the main Ministry (Secretariat) and the following nine attached or subordinate offices—

Ministry of Labour (*Secretariat*)—Is the central administrative machinery for the formation of labour policy, for the enforcement of labour laws and for the promotion of labour welfare. It coordinates the activities of Governments in the labour sphere. It also forms the Secretariat for the Tripartite Labour Conferences and Committees connected with particular industries and is the channel for India's participation in the activities of the International Labour Organisation.

(*a*) *Director-General of Resettlement and Employment, New Delhi*—The organisation was originally set up for finding employment for the ex-services personnel and discharged war-workers. The scope of this organisation has since been extended to meet the needs of all categories of persons in search of employment.

(*b*) *Labour Bureau, Simla*—The Bureau was set up in October, 1946 and has been responsible for (1) collection of labour statistics, (2) maintenance of cost of living index numbers, (3) keeping up-to-date the factual data relating to working conditions collected by the Labour Investigation Committee, (4) conducting to research into specific problems with a view to furnishing data required for the formation of policy, (5) editing the monthly *Indian Labour Gazette*, (6) compiling *Labour Code* of various legislative enactments and the statutory rules thereunder and a *Labour Year Book*.

(*c*) *Office of the Labour Commissioner, New Delhi*—The organisation deals with (v) conciliation, (2) examination of welfare measures and advice to the employees and government in connection therewith, (3) operation of labour laws to the extent of Central responsibility, (4) to organise and set up canteens in all government undertakings, besides offering advice to provincial Governments, States and Administrations.

(*d*) *Office of the Coal Mines Welfare Commissioner, Dhanbad*—The Commissioner deals with (*i*) the administration of Coal Mines Labour Welfare Fund Act 1947 and (*ii*) the administration of the Mica Mines' Labour Fund Act 1946.

(*e*) *Department of Mines, Dhanbad*—The activities of this Department are (*i*) enforcement of the Indian Mines Act 1923, (*ii*) inspection of mines, (*iii*) investigation of accidents, (*iv*) inspection of electrical installations and machinery, (*v*) technical advice to mine owners, (*vi*) prosecutions, (*vii*) collection of statistics and (*viii*) enforcement of the Mines Maternity Benefit Act, 1941.

(*f*) *Office of the Chief Adviser, Factories, New Delhi*—This office deals with (*i*) technical service on all matters relating to design of factories and working conditions. (*ii*) Administration of the Ind. Dock Labourer's Act, 1934 and the Indian Dock Labourers' Regulations, (*iii*) Factory Administration including training of Factory Inspectors, (*iv*) Information Service, (*v*) preparation of posters sketches and pictures on industrial safety, health and welfare.

(*g*) *Office of the Controller of Emigrant Labour, Shillong*—The office deals with (*a*) interpretation of the Tea Districts Emigrant Labour Act, 1732 and the Rules. (*b*) recruitment, repatriation of labour and inspection of tea gardens and depots (*c*) compensation cases relating to persons belonging to provincial Civil Labour units and State Labour units who worked on Defence projects.

(*h*) *Industrial Tribunals, Dhanbad, Calcutta and Bombay*—The Tribunals have been established under Sec. 10 of the Industrial Disputes Act, 1947 to adjudicate on major disputes in the Central or Provincial field.

(*i*) *Office of the Coal Mines Provident Fund Commissioner, Dhanbad*—The organisation was set up in 1948 for (*a*) administration of Coal Mines Bonus Scheme, (*b*) administration of Coal Mines Provident Fund Scheme which have been formed under Coal Mines Provident Fund and Bonus Schemes Act 1948.

INDUSTRIAL PEACE

In the wake of independence, the relations between labour and capital became strained due to rising prices and the increased cost of living. This led to the demand of better wages and larger share in the profit.

To meet the situation, the Government convened a *tripartite conference* comprising representatives of the Government, employers and workers. This conference adopted what is known as *Industrial Truce Resolution*, which was accepted by the Government in April, 1948. The resolution called upon the workers and employers to maintain industrial peace and prevent lockouts and strikes for a period of three years. The resolution urged labour to realise its duty—(1) to increase the national income without which a rise in the general standard of life cannot be achieved, (2) mutual discussion of all problems common to employers and the workers. It also declared that the system of remuneration to capital and labour must be so devised that both should share the product of their common effort after making provision for payment of fair wages to labour, a fair return to capital employed and reasonable reserves for maintenance and expansion of the undertaking.

The most important step taken towards the implementation of the industrial truce resolution was the setting up a number of tripartite bodies.

A Central Advisory Council for Labour composed of representatives of the Government, employers and workers was constituted in September, 1948.

Tripartite Industrial Committees were set up in cotton textiles, coal mines, plantations, tanneries, and cement and leather goods factories to establish better relations between employers and employees. *Works Committees*, which are tripartite in composition, were and are being formed in the various undertakings to encourage direct negotiations between employers and employees in the settlement of day-to-day problems at the unit level. Similarly *Production Committees* are being set up at the unit level to deal with questions relating to increase in production. The *Industrial Disputes Act, 1947* provided more prompt and effective machinery for resolving industrial disputes.

The Central Government and some of the State governments have established standing industrial tribunals for speedy adjudication of disputes. A number of whole-time conciliation officers have been appointed in different parts of the country.

TRADE UNIONS IN INDIA

The trade union movement in India was born with the formation of strike committees after the end of World War I, when there was an outburst of industrial strife. The first attempt at trade union organisation, with regular membership of workers in an industrial centre, was when Mr. B. P. Wadia founded the Madras Labour Union in 1918. It did excellent work in redressing the grievances of workers, but in 1921 the law was made use of against it by employers who obtained an order from the High Court restraining the Union leaders. This event focussed the attention of the public on the need for trade union legislation which did not exist then in the country.

Meanwhile, in 1920, in Ahmedabad, an association of workers was formed, which has become a model union. It was unique in its constitution and in its leadership. Under the guidance of Mahatma Gandhi the Ahmedabad Textile Labourers' Association has been able to build up a solidarity which is unrivalled. The Union is one of the strongest in the country. The chief importance of the Union lies in the fact that it has devised an elaborate system of joint conciliation and arbitration with the Ahmedabad Millowners' Association by which this textile centre has been almost free of strikes.

The year 1920 also saw the establishment of the *All-India Trade Union Congress* as a central organisation of labour. The main impetus to its founding was the association of India with the International Labour Organisation. The misgiving that 'yes-men' would be nominated as worker's representatives on the India delegation, is said to have moved labour leaders to form the All-India Trade Union Congress.

The passing of the Indian Trade Union Act of 1926 gave not only recognition but also legal status to trade unions. Their executives and members were granted immunity from civil and criminal liability in respect of strikes. The act also allowed the funds of the registered unions to be spent for the conduct of trade disputes and for the provision of benefits to its members.

All India Trade Union Congress received unstinted support from all quarters. But owing to internal dissensions, a section led by the moderates seceded from this body and formed *National Federation of Trade Unions.* This secession continued till 1938 when the new organisation was merged again with the All India Trade Union Congress on the principle or equal representation.

The attitude of All Indian Trade Union Congress towards the war (principle of neutrality) was responsible for the creation of another central trade union organisation, the *Indian Federation of Labour* under the guidance of the Radical Democratic Party led by Mr. M. N. Roy which supported the Government's war efforts. The growing influence of the communists who had practically captured the A. I. T. U. C. led to many complications. The growing labour unrest led the Congress to form a new all India body, known as *Indian National Trade Union Congress* which was started in May, 1947. With the establishment of the I. N. T. U. the leadership of the older body has been assailed. I.N.T.U.C. now claims to be the largest representative organisation of Indian workers and it was accepted by the Government as the most representative organisation of workers in the country. The Socialists in the mean time started their own labour organisation known as *Hind Mazdoor Panchayat.* In December 1941, the representatives of Hind Mazdoor Panchayat and of Indian Federation of Labour and many independent trade unionists met in conference in Calcutta and formed a new all-India organisation under the name *Hind Mazdoor Sabha.* The Indian Federation of Labour ceased to exist. Some of the trade unionists who had earlier seceded from A.I.T.U.C. also attended the Calcutta conference but they did not join the Hind Mazdoor Sabha but in 1949 they sponsored another all-India labour organisation named *United Trade Union Congress.*

Employment and Training—Before World War II, there was no machinery for the direct recruitment of labour and others seeking employment. The *Employment Exchange Organisation* which was started in 1945, cartered in the first instance to the needs of ex-servicemen and discharged war-workers only.

The influx of a large number of displaced persons from Pakistan in 1947 created a difficult situation. So the portals of the employment organisations were thrown to all classes.

At present there are 124 Employment Exchanges in the country. They are grouped into ten regions each under the administrative control of a Regional Director. Tripartite Advisory Committees are associated with the organisation at the national, regional and local levels. The main function of an Employment Exchange is to bring employers and the employment seekers together. It promotes mobility of labour and assists employers in finding right type of men.

With a view to increasing production, both the central and State governments have been instituting Works Committees in industrial units.

INDIA AND THE INTERNATIONAL LABOUR ORGANISATION

India has been an active member of the I.L.O. from its very inception in 1919. She has been considered as one of the eight leading industrially important countries in the world. Her contribution to the finances of I.L.O. is also considerable, amounting to 5 p.c. of the total revenue of the Organisation.

The International Labour Conferences have so far ratified 90 convention, of which India has ratified for 16 conventions. In addition India has incorporated into her national legislation the essential features of many of the other Conventions (*i.e.*, Childbirth Convention, 1919 and the Minimum Age (Revised) Convention 1937.

India is the member of the following seven Industrial Committees of I.L.O.—(1) Textiles, (2) Coal Mining, (3) Iron and Steel, (4) Metal Trades, (5) Building, Civil Engineering and Public Works, (6) Inland Transport and (7) Chemicals.

In addition to International Labour Conferences and Committees, India is also participating in *ad hoc* Conferences convened by I.L.O.

LABOUR AND THE CONSTITUTION

Main provisions relating to Labour are as follows:—

(1) Article 23 prohibits *begar* and other similar form of forced labour and Article 24 lays down that no child below the age of 14 years shall be employed to work in any factory or mine or engaged in any other hazardous employment.

(2) *Article 39 contains certain principles of policy to be followed by the State:*—The State shall, in particular direct its policy towards securing —(*a*) That the citizens, men and women equally, have the right to an adequate means of livelihood, (*b*) that the ownership and control of the material resources of the community are so distributed as best to subserve the common good, (*c*) that the operation of the economic system does not result in the concentration of wealth and means of production to the common detriment, (*d*) that there is equal pay for equal work for both men and women, (*e*) that the health and strength of workers, men and women and the tender age of children are not abused and that citizens are not forced by economic necessity to enter avocation unsuited to their age or strength, (*f*) that childhood and youth are protected against exploitation and against moral and material abandonments.

(3) *Article 41 relates to right to work, to education and to public assistance in certain cases:*—The State shall, within the limits of its economic

capacity and development make effective provision for securing the right to work, to education and to public assistance in cases of un-employment, old age, sickness and disaffernment and in other cases of undeserved want.

(4) *Article 42 relates to provision for just and humane conditions of work and maternity relief:*—The State shall make provision for securing just and humane conditions of work and for maternity relief.

(5) *Article 43 relates to living wage etc. for workers:*—The State shall endeavour to secure by suitable legislation or economic organisation or in any other way, to all workers, agricultural, industrial or otherwise, work, a living wage, conditions of work ensuring a decent standard of life and full enjoyment of leisure and social and cultural opportunities and in particular, the State shall endeavour to promote cottage industries on an individual or co-operative basis in rural areas.

Labour interest in the three lists: Union, Concurrent and State—

Union list (13) participation in international conference, associations and other bodies and implementing of decisions made there at. (28) Port quarantine including hospitals connected therewith, seamen's and marine hospitals (55) Regulation of labour and safety in mines and oil fields (61) Industrial disputes concerning Union employees (65) Union agencies and institutions for (*a*) Professional, vocational or technical training; or (*b*) the promotion of special studies or research (94) Enquiries, surveys and statistics for the purpose of any of the matters in this list.

Concurrent list—(20) Economic and social planning, (21) Commercial and industrial monopolies, combines and trusts, (23) Social security and social insurance employment and unemployment, (24) Welfare of labour including conditions of work, provident funds, employer's liability, workmen's compensation, invalidity and old age pensions and maternity benefits, (25) Vocational and technical training of labour, (36) Factories, (45) Inquiries and statistics for the purpose of any of the matters specified in the concurrent list and State list.

State List—(9) Relief of the disabled and unemployable.

TRADE UNIONS IN INDIA

	No.	*Membership*	*Total income (Rs.)*		*No.*	*Membership*	*Total income (Rs.)*
1937-38 ..	420	390,112	693,444	1943-44 ..	761	780,961	2,318,780
1938-39 ..	562	399,159	889,822	1944-45 ..	865	889,388	1,939,969
1939-40 ..	667	551,138	1,121,797	1945-46	1087	846,031	2,467,607
1940-41 ..	727	513,832	1,212,927	1946-47	1725	1,331,962	4,250,331
1941-42 ..	747	573,520	1,767,446	1947-48	2766	1,662,929	5,689,361
1942-43 ..	693	685,299	1,596,984	1948-49	3150	1,960,107	..

FACTORIES IN INDIA

	Factories	Workers		Factories	Workers
1942	12,527	2,282,288	1945	14,721	2,642,949
1943	13,209	2,436,312	1946*	14,205	2,314,587
1944	14,071	2,522,753	1947†	14,576	2,274,689
			1948‡	15,906	2,360,201

* Figure exclude Punjab and N.W.F.P.

† These figures relate to Indian Union while previous ones relate to Br. India.

‡ Excluding Pakistan.

INDIAN MINES AND WORKERS

	No. of Mines	Workers		No. of Mines	Workers
1939	1,864	305,344	1947*	1,976	407,263
1945	2,151	386,290	1948†	1,897	395,865
1946	2,119	412,719			

INDUSTRIAL DISPUTES IN INDIA

	No. of Disputes	Workers involved	Loss of man-days		No. of Disputes	Workers involved	Loss of man-days
1939	406	409,189	4,992,795	1945	820	747,530	4,054,499
1940	322	452,539	7,577,281	1946	1,619	1,961,948	12,717,762
1941	369	291,054	3,330,503	1947	1,811	1,840,784	16,562,666
1942	694	777,650	5,779,965	1948	1,259	1,059,120	7,837,173
1943	716	525,088	2,342,287	1949	920	685,457	6,600,595
1944	658	550,015	3,447,306	1950	814	719,883	12,806,704

WORKMEN'S COMPENSATION IN INDIA

	Total No. of cases	Total compensation paid (Rs.)		Total No. of cases	Total compensation paid (Rs.)
1939	38,681	15,09,327	1944†	31,581	16,96,494
1940	41,015	19,38,476	1945	67,390	4,225,339
1941	39,045	15,84,293	1946	55,241	3,625,808
1942	44,443	18,69,359	1947	53,574	3,326,495
1943*	44,826	22,83,991	1948	66,776	4,220,068

* Excludes figures of Bombay.

† Excludes figures of Bombay and Madras.

INDIA'S WATER POWER & ELECTRICITY

Potentialities of Hydro-electric Power in India—Cheap power is needed for domestic purpose, for the manufacture of fertilisers, for agriculture, and for industry. It is needed further to conserve India's limited resources in high-grade, particularly metallurgical coal, vast quantities of which at present being used up in generating power for industry, locomotive power for railways and as domestic fuel. Coal as a means of generating power is exhaustible, but water is inexhaustible. It use for power generation would release coal for use of other purposes of national importance.

A river tamed is a source of power and wealth. It yields electricity to light cities, work factories, and run trains. Its water can be made to irrigate barren fields, prevent floods and ease navigation for inland steamers. In a country uneasy over the exhaustibility of its coal supplies, rivers are the key to an industrial centre.

On a rough calculation, the mean annual supply of water in our rivers appears to be of the order of 2·3 million c.ft. per second. The mean annual consumption of water for agricultural purposes derived from canals has been roughly figured out as 133,000 c.ft. per second. Possibly another 30,000 c.ft. per second is utilised for irrigation of wells. This means that less only about 6 per cent of available water-wealth in our rivers is being utilised and the balance of 90 p.c. is running to waste in the sea and doing incalculable damage to life and property through uncontrolled floods, stagnating pools and malaria mosquitos.

Coal is no doubt the main source of industrial power, but in region far away from the coal fields of Bengal and Bihar, the coal costs much and hence hydro-electric power is being rapidly developed in many parts of the country.

India now promises to be one of the leading countries of the world in the development of hydro-electric power and great strides in this direction have already been made. Her potentialities for hydro-electric development is estimated at some 39 million horse power out of the world total of 300 millions. Only about a half million horse-power has so far been harnessed.

The total installed capaciy of hydro-electric works in India today is about 0·5 million kilowatts. This represents roughly 1·5% of the country's power potential.

The first hydro-electric plant installed in India was a small municipal town lighting plant at Darjeeling, in 1897-98. After this came the hydro-electric installation on the Cauvery river at Siva Samudram in 1903. It supplies electricity to Mysore, Bangalore and Kolar Goldfields. The biggest hydro-electric undertakings are the three schemes developed by the firm of Tata & Sons. The Tata groups of installations now have a combined capacity of 250,000 horse-power and supply 30 p.c. of the total electrical energy generated in India.

An unwholesome feature of the scanty progress made in India is that most of the existing installations have been planned to satisfy the demands of urban areas. This is best illustrated by the fact that Calcutta and Bombay, with a total population of one per cent of the whole country between them, consume 50% of the total electric energy produced in India, leaving the other 50% for the remaining 90% of the population.

When the hydro-electric projects now under construction or awaiting construction are completed, India's resources of developed waterpower will probably rank as the third largest in the world, next only to those of the U.S.A. and Russia.

Three classes of Hydro-electric Power—The Hydro-electric Schemes in India are of three classes—(1) Hydro-electric power for large industrial and commercial towns, such as Bombay, (2) Hydro-electric power for irrigation works, such as works connected with Upper Ganges Canal, (3) Hydro-electric works in hill stations such as Shillong.

Government Researches—*Research stations*—The research activity in India is steadily increasing. There are *Punjab Irrigation Research Institute, Indian Waterways Experiment Station, Poona, the Bengal River Research Institute, the U.P., Madras and Bombay Research Stations.* New stations are being set in Hyderabad and Mysore.

Central Water-Power Departments—Until as recently as 1945 the initiative for preparing water development schemes rested entirely with the provinces, and there was no central organization to encourage the study and planning of schemes on major rivers involving more than one political unit. By creating *Central Waterways Irrigation and Navigation Commission* and the *Central Technical Power Board,* the Central Government have satisfied a long felt want. Two organisations under CWINC are the *Central Design Organisation* and the *Central Water-Power, Irrigation and Navigation Research station.*

In 1944 *Central Technical Power Board* was set up by the Government of India for a period of five years in the first instance to serve as a body of Consulting Engineers. Its function is to act as a Central Government engineering planning agency to be available for Central, Provincial and State Governments for the preparation of multipurpose hydro-electric and thermal power schemes. It also furnishes economic studies and estimates costs and recommends the course of action necessary for implementing the various projects. It also prepares schemes to promote rural electrification projects. In discharging these functions, the Board acts purely as a Technical Advisory Body without any mandatory powers.

There is also *Electric Commissioner's Office* which though intimately associated with the above Board, is a separate organisation. It is a permanent government institution acting as a Central Bureau of Information on the development of electricity supply in this country. It also helps the industry to develop and secure its major requirements of heavy plant and equipment.

Methods of Production of Electricity—The electricity produced from coal and oil—sources on which India has depended for many years is expensive. Expert opinion has it that "both from the point of view permanancy as well as installation and operational economy, it would be best to develop power mostly from water. Thermal stations should be limited generally to coal-bearing areas using only low great coals and should otherwise be installed to serve as nursery stations to build up-load in advance of water power stations." Water is inexhaustible, whereas minerals are wasting assets. The water potential of India is estimated at about 40 m.kw. Present installed capacity is little more than half a million killowats.

State Control—With the *Electric (Supply) Act 1948* the control of public utility electric supply finance was commenced. Under this Act, the generation and distribution in India is controlled by the State. Among its essential feature are the constitution of a *Central Electricity Authority* and setting up of Provincial (now State) Electricity Boards. The function of C.E.A. includes the development of a sound adequate and uniform national power policy and co-ordination of the activities of the planning agencies in relation to the control and utilization of power resources. The State Electricity Boards are also statutory corporations and although subject to the over-all co-ordination by C. E. A., have considerable autonomy and great responsibilities. They are required to co-ordinate and stimulate electrical development by methods leading to a progressive reduction in cost and exercise a form of financial control on commercially owned undertakings whereby the investor is assured of a fair return, the industry of adequate capital and the consumer of low rates. This implies working in co-operation and harmony with private enterprise in the industry.

A *Central Electricity Commission* was constituted in March, 1948. The Commission is responsible for co-ordinating and furthering all schemes of electric power development and utilisation throughout the country in consultation with State Governments.

Some Facts—Electricity is now mostly confined to urban areas. Bombay, Calcutta and Kanpur among them account for as much as 48 per cent of consumption of power supplied by public undertakings. Bombay and West Bengal combined generate more electricity than rest of the Indian Union combined.

The per capita generation of electricity in India compared with other countries is very poor. In 1947 it was 3,580 kwh in Canada, 1775 kwh in U.S.A., 1,717 kwh in Sweden, 855 kwh in U.K., and 390 kwh in Japan. In India it was only 12 kwh.

Marked progress occurred in rural electrification, but this was mostly confined to the States of Madras, Mysore, Uttar Pradesh and the Punjab. Taking the country as a whole, only 0·38 per cent of the villages with a population of less than 5,000 had electricity in 1949.

The *per capita* consumption of electricity in India as a whole in 1949 was 11·64. The figures relating to some of the States (in kilowatt-hours) are: Delhi 105; Bombay 47·7; West Bengal 40·7 and Mysore 39. In Madhya Bharat, Bihar, Hyderabad, Madhya Pradesh, Rajasthan and PEPSU, the per capita consumption was between two and three kilowatt-hours only. In Assam and Orissa, the per capita consumption was even lower—slightly over half and quarter kilowatt-hours respectively.

Electrification of Rural Areas—The rapid electrification of rural areas is one of the urgent tasks to which the Government have applied itself earnestly. In 1947 only 1,295 villages with a population of less than 5,000 each were electrified. This figure rose to 2118 in 1949. In other words about thirty eight villages out of every 10,000 each with a population below 5,000 are now served by electricity.

Uttar Pradesh

New Schemes—Sarda Hydro-electric project is one of the major schemes in hand. It is proposed to combine into a single drop a large number of existing falls on the Sarda Canal and to install a power house near the headworks of the Sarda Canal. The power house will generate 41,400 kw. of electrical power for domestic, agricultural and industrial purposes for large number of U.P. towns. *The Jamuna Hydro-electric project* is another major scheme for power development. It will utilise for power generation a total drop of approximately 750 feet available in the rivers Tons and Jamuna. The development of power will be in two stages. In the first stage 40,000 kw. and in the second stage 49,000 kw. will be available throughout the year. *Jamuna Hydro-electric Scheme*—Foundation stone was laid by Pandit Nehru on May 23, 1949 for this first river valley project in the U.P. at Dak Pather, 30 miles from Dehra Dun. On an average 47·6 million units (kilowatt hours) of electricity will be generated annually. A huge barrage will be constructed across Jamuna at Dak Pather. The project will approximately cost Rs. 17 crores.

Bombay

In the Bombay Presidency Hydro-electric System is entirely carried out by the Tata Hydro-Electric system. There are four companies associated in this enterprise, namely, the *Tata Hydro-Electric Power Supply Co., Ltd.,* (established 1910), the *Andhra Valley Power Supply Co., Ltd.,* (established 1916), the *Tata Power Co., Ltd.,* (established 1919), and the *United Power Ltd.,* (established 1937).

Harnessing waters of five lakes at Lonavla, Walwhan, Shirawta, Thokerwadi and Mulshi with their three generating stations at Khopoli, Bhivpuri and Bhira, the group has a combined capacity at present exceeding 250,000 horse-power. This power is carried over 275 miles of 100,000 volt overhead lines to Bombay and Poona and along 200 miles of high tensioned underground system in Bombay. The total capital invested in the project is Rs. 9,66,97,000. It supplies electricity to Bombay cotton mills, Bombay Tramways and Electric Company and to a lot of other industrial towns.

The Government of Bombay have established a special grid department for the following schemes (1) *North Guzarat Grid Scheme,* (2) *South Guzarat Grid Scheme,* (3) Rural electrification and small town schemes passed on small Diesel Stations.

The most important scheme undertaken by the Government of Bombay is *Koyna Hydroelectric Scheme* to be started across Koyna river at Jalkawadi in Sataa district about 270 miles from Bombay.

Madras

Madras ranks third among the States in the Indian Union in the matter of development of electricity and second so far as hydro-electric power output is concerned.

1. *Pykara Hydro-electric Scheme* developed in 1932 on the Pykara River in the Nilgiri district gives power to Coimbatore, Erode, Negapatam, Trichinopoly, Madura. This Pykara Scheme depends upon the 300 feet high falls on the Pykara river which flows from the Nilgiris.

2. *Mettur Hydro-electric Scheme* below Mettur dam provides energy to Salem, Trichinopoly, Tanjore, North Arcot, Chittoor. It also provides water for irrigation. The Stanley dam enclosing the lake is one of the largest in the world, 176 ft. high and can impound a total of 92,500 million feet of water.

3. *Papanasam Hydro-thermal Electric System*—The scheme was sanctioned in 1938. The system covers all districts south of Madras. The scheme utilizes the fall of about 330 ft. in the passage of Thamberapani river in the Tinnevelly district.

New Schemes—Madras Government have sanctioned Five Year programme of construction of following schemes and extensions—(1) Machkund Hydro-electric Scheme, (2) Nellore Thermal Scheme, (3) Madras Thermal Extension Scheme and inter-connection with Mettur Hydro, (4) Ceded Districts Scheme, (5) Moyar Scheme, (6) Pykara Hydro-electric Scheme extensions, (7) Madura Thermal Scheme.

Mysore & Travancore

1. *Hydro-electric* power on the Cauvery river in Mysore supplies power to Kolar Gold fields and also to Bangalore and other towns. The

generating station is situated at Siva Samudram, 90 miles from Kolar Gold fields. This was inaugurated in 1902.

2. *Jog Power Scheme*—renamed Mahatma Gandhi Hydro-electric Works. Waters of Sharavati river have been harnessed at Jog or Gersoppa Falls in Mysore State for producing 120,000 kilowatts of electricity at an expenditure of Rs. 8·3 crores. Not only Mysore State but also States of Madras and Bombay will be benefitted by the scheme which is expected to be completed soon.

3. An important scheme of Travancore is *Pallivasal Hydro-electric system* completed in 1940. It extends up to Alwaye on the west and up to Kundara in the south.

Kashmir

Hydro-electric power at Baramulla, 14 miles from Srinagar from the waters of Jhelum provides energy to Srinagar. Other two schemes are *Muzaffarabad hydro-electric Station* utilising a tributary of the Kishen Ganga river and the *Jamuna hydro-electric installation.*

Punjab

Uhl River or *Mandi Scheme* (opened in 1933) supplies power to the East Punjab Railway and towns such as Amritsar, Ludhiana, etc. The Uhl river, a tributary of Beas has beeen harnessed in Mandi State at a distance of about 200 miles from Lahore. The Uhl river project serves at present an area of 46,000 sq. miles and a population of 15 lakhs.

Amritsar Hydro-electric installations is located near Amritsar and utilises the fall of 6-10 ft. in Bari Doab Canal of Ravi river which runs one side of Lahore.

The most important project of Punjab is *Bhakra-Nagal Project*—one of the biggest of its kind in he world.

Madhya Bharat

Chambal Hydro-electric scheme has been undertaken by the Madhya Bharat Union. The dam is expected to be completed in five years. The project would supply power to the whole of Madhya Bharat and would be utilised for both cottage and power industries.

Madhya Pradesh

The State for purposes of electrical development is divided into three grid areas—(1) Southern (2) Northern and (3) Eastern. Each of these areas will have independent electric grid system fed initially by one or more suitably located thermal stations. (1) Southern Grid consists of thermal station at Khaperkheda near Nagpur and capacity Station at Chandni near Burhanpur; (2) Northern Grid covers the northern parts of the State; (3) Eastern Grid covers the eastern parts of the State. It envisages the establishment of a new pilot power station at Raipur.

Hyderabad (Deccan)

There are several Hydro-electric Schemes in this State, such as: *Tungabhadra Project* across the river Tungabhadra; *Davanoor Project;* across the river Manjira, a tributary of the Godavari; *Nizamsagar Project; Godavary-Kadam Project; Pudua Project,* across the river Manair;

Penganga Project on the boundary between Berar and Hyderabad; *Lower Kistna Project, Upper Kistna Project.*

Hyderabad State have decided to proceed at once with *Nizamsagar Project* for bringing hydro-electric power to Hyderabad city. An agreement has also been reached on the division of the waters of *Tungabhudra* river between Government of Mysore, Madras and Hyderabad which will enable Hyderabad State to generate hydro-electric power.

OUTSTANDING FEATURES OF THE ELECTRICITY SUPPLY INDUSTRY 1945-49

Generating Capacity (kw)	1945	1946	1947	1948	1949
Steam plant ..	682,220	725,185	757,457	788,393	852,639
Oil plant ..	92,815	91,920	97,679	107,109	125,468
Hydro plant ..	474,419	484,419	508,129	515,554	559,079
	1,249,454	1,301,524	1,363,265	1,410,966	1,537,186
Output (million wkh)					
Steam plant ..	1,765·196	1,688·354	1,733·980	2,047·012	2,243·669
Oil plant ..	123·122	132·128	144·802	155·165	175·755
Hydro plant ..	2,104·520	2,071·794	2,194·536	2,373·289	2,489·865
	3,992·838	3,892·276	4,073·318	4,575·466	4,909·289
Sales (million wkh)					
Domestic Light & Small power ..	260·753	301·320	338·085	409·102	473·621
Commercial Light & sm. power ..	186·346	193·890	209·032	234·118	277·262
Industrial power	2,345·476	2,181·752	2,134·805	2,435·000	2,568·374
Irrigation ..	93·481	105·054	125·243	121·168	150·190
Other purpose ..	458·747	475·786	549·629	522·076	535·286
	3,344·803	3,257·802	3,356·794	3,721·468	4,004·716
Consumers ..	..	..	..	1,178,715	1,260,685
Connected load (kw) ..	..	..	..	2,278,499	2,364,900
Electrified towns					
Pop. under 5000	..	..	1,295	1,959	2,168
Pop. above 5000	..	..	802	808	820
Capital Expenditure Rs. crores ..	..	..	..	115·5	118·6

NUMBER OF TOWN & VILLAGES IN INDIA ELECTRIFIED

(Upto 1949 on the basis of 1941 census)

Population range	*Total No. of towns or villages*	*No. of towns & villages with public Elect. Supply*	*P.c. of towns & villages with public Elect. Supply to total %*
Over 100,000 ..	49	49	100·00
50,000—100,000	87	86	98·85
20,000— 50,000	277	233	84·12
10,000— 20,000	607	231	38·06
5,000— 10,000	2,367	221	9·34
Below 5,000 ..	559,062	2,168	0·39
	562,449	2,988	0·53

PER CAPITA CONSUMPTION OF ELECTRICITY, 1949

	per capita (kwh)		*per capita (kwh)*
Assam ..	.. 0·613	Madhya Pradesh	.. 2·443
West Bengal ..	.. 40·675	Madras ..	.. 9·561
Bihar ..	.. 2·649	Mysore ..	.. 39·098
Bombay ..	.. 47·677	Orissa ..	.. 0·253
Centrally Administered Areas		Pepsu ..	.. 1·927
		Punjab ..	.. 5·156
Delhi ..	.. 104·904	Rajasthan ..	.. 2·326
Rest ..	.. 1·186	Saurashtra ..	.. 4·838
Hyderabad ..	.. 2·410	Travancore Cochin	.. 17·314
Jammu & Kashmir	.. 4·130	Uttar Pradesh	.. 7·315
Madhya Bharat	.. 2·972		

PROGRESS OF ELECTRICITY SUPPLY 1939-49

	Kwh generated (millions)	*Kwh sold* (millions)		*Kwh generated* (millions)	*Kwh sold* (millions)
1939	.. 2,442·415	2,034·636	1945	.. 3,992·843	3,344·803
1940	.. 2,702·056	2,249·971	1946	.. 3,892·276	3,257·802
1941	.. 3,120·817	2,663·415	1947	.. 4,073·318	3,356·794
1942	.. 3,160·187	2,662·628	1948	.. 4,757·466	3,721·464
1943	.. 3,445·195	2,899·716	1949	.. 4,909·289	4,004·716
1944	.. 3,719,841	3,131·415			

(*Public Electricity Supply All-India Statistics,* 1949)

PUBLIC HEALTH & HYGIENE

Development of Public Health Administration—The Royal Commission of 1859 appointed to enquire into the conditions of health of the army in India, recommended measures not only for the army but also for civil population. In accordance with its suggestion, Commissions of Public Health were established in the province of Madras, Bombay and Bengal.

In 1864 certain administrative posts were however created at the Centre and in the Provinces. The officers concerned were designated sanitary commissioners. The report of the Plague Commission in 1904 recommended the strengthening of public health service and for the establishment of laboratories for research and for preparation of vaccines and sera, This resulted in the creation of a Medical Research Department under Central Government, the establishment of Indian Research Fund Association and annual grants to the provinces.

The Government of India Act of 1919 decentralised health administration by transferring it, to provincial governments except the control of research and under the Government of India Act of 1935 distribution of health functions between the Centre and Provinces were further carried out.

The public health is now a State subject. There is a *Director of Public Health* in each State who carries on the preventive functions in connection with diseases, and epidemics. The actual task of cure and medical relief is organised under the control of *Surgeon-General* in the three States of Bombay, Calcutta and Madras and *Inspector-General* for Civil Hospitals in other States. In each district there is a hospital under a civil surgeon.

There is a *Director-General* and a *Public Health Commissioner* for all India. The Director-General advises Government on all questions of medical nature. The Public Health Commissioner is the adviser to the Government on all public health matters, issuing of vital statistical returns. The Central Government also maintains a *Central Advisory Board of Public Health.* It generally acts in an advisory capacity.

States and the Centre in relation to Public Health—Medical relief and public health are State subjects though Centre plays an important part in co-ordinating health administration of the States. In addition to the subjects enumerated in the Union List the functions of the Central Government are co-ordination, provision of facilities for discussion, supply of information and competent advice and such other assistance as is necessary for the production of health in a country. The Centre also acts as a liaison between foreign countries and the States. It collects statistical and other information regarding health problems which are circulated by the Central Health Board to the State Governments.

Ministry of Health—With the advent of independence, a Ministry of Health has been established at the Centre. This Ministry is responsible for the health of the Centrally Administered Areas. The States are autonomous in respect of medical relief and public health. The Centre however advises the States and keep in close touch with them in their endeavours to build up the health of the people committed to their charge.

In wider aspect the functions of the Central Ministry of Health may be summarised as follows:—

(1) To be responsible for international health relations and the administration of port quarantine.

(2) To administer the Central health institutions—the All India Institue of Hygiene and Public Health, the Malaria Institute, the Central Research Institute, the Serologist's Laboratory, the Central Drugs Laboratory, and such other Central Health Institutions as may be created from time to time.

(3) To promote research through the Indian Council of Medical Research and other bodies.

(4) To promote in consultation with State Governments the regulation and development of the medical, pharmaceutical and dental and nurising professions.

(5) To promote, in consultation with State Governments, the establishment and maintenance of drug standards.

(6) To lay down and enforce appropriate standards of medical, dental, nursing, pharmaceutical and other anillary branches of Health Education.

(7) To collect information regarding developments in the medical sciences and in health administration in India and elsewhere and to make such information available to State Governments and their Medical and Health Departments.

(8) To promote through a Central Health Board and otherwise discussions and exchange of information on health problems.

(9) To promote through a Central Health Board and otherwise special inquiries into particular health problems and co-ordination of effort thereon.

(10) To collate and give publicity to statistical and other information relating to health problems with the object of stimulating the interest of and educating both the professional and lay public on health matters.

(11) To discharge the functions of the State Government in Health and Local Government matters in the centrally administered areas.

(12) To build up and maintain a Central Health Service for the purpose of (*a*) ensuring high standards of administration at the Centre, (*b*) collaborating with the States for the maintenance of an equally efficient standard in their administration, (*c*) making available to the Centre and the States the services of highly qualified personnel for teaching, research and medical institutes.

Medical Education—The medical colleges were first opened in Madras and Calcutta in 1835 and recognised by the Royal College of Surgeons i. 1845. Since then there has been gradual progress of medical education in India. Practically all medical colleges offer a Doctorate of Medicine, Master of Surgery, etc. Several of the colleges are offering D.P.H. or equivalent. There is also a special provision for military medical students of the Indian Medical Department. On the recommendation of the Inter-University Board, an All India Council of Post-Graduate medical education has been set up. The Council will prescribe standards for post-graduate medical education in the universities, and advise them in order to secure uniformity of standards throughout the country.

Boards, Associations, Councils etc. for All-India Public Health—We give below a list of boards, associations, councils etc. of Public Health for all India—

Central Advisory Board of Health—was started in 1937, in which all State governments are associated. It provides a forum for the purpose of discussing and formulating of public health policy and also to ensure co-operation between the Centre and the States and between State and State.

Indian Nursing Council—was inaugurated at Delhi on May 19, 1949. One of the main functions of the Council is to lay down minimum standards for the training of nurses. The Indian Nursing Council has been vested with the power to inspect training institutions and examination. The efforts of the Council is directed towards attaining a uniformly higher standard than that which exists today.

Indian Medical Association—This is an all-India organization of medical practitioners of India founded in 1928-29 for the purpose of looking after the interest of medical education, public health and the medical profession in India.

Medical Store Depots and Factories—There are at present four main medical depots in Madras, Bombay, Calcutta and Karnal, Factories are attached to the first two depots. The Depots and Factories are running on a commercial basis and are self-financing.

Medical Council of India—was constituted in 1933 along the lines of General Medical Council of Great Britain. The Council tries to maintain uniform minimum standard of university medical qualifications for India proper and tries to arrange for reciprocal recognition in India proper of approved qualifications but it has no disciplinary power.

Health Publicity Bureau—has been established according to the Bhore Committee's recommendations with a view to disseminating useful information on health in a popular way to make the people health-minded.

Drugs Control and Drugs Technical Board—Under the Drugs Act of 1942, the Central Government constituted the Drugs Technical Board in 1942. Its functions are to advise the Central and Provincial Governments on technical matters arising out of the administration of the Act.

The enforcement of the control over manufacture, distribution and sale of drugs in the States is the concern of the state governments. The Central Government is responsible for control over standard of drugs imported into India and over the manufacture, distribution and sale of drugs in the Centrally-administered areas.

Indian Research Fund Association—The Association is subsidised by the Government of India and was founded in the year 1911 for the purpose of conducting research in medicine and allied subjects. It is managed by a Governing Body whose members are appointed by the Government of India. The research conducted by the Association covers a wide field such as malaria, cholera, leprosy, filariasis, nutrition, industrial health, maternity and child welfare, clinical research etc. The Association has a number of Advisory Committees and grants annually 15 fellowships for research work, both medical and non-medical. The fellowship carries a stipend of Rs. 250 per month tenable for two years.

Provincial Medical Councils—began to function from 1942 when the first Provincial Medical Council was started in Bombay. It is now functioning in all the States. The Provincial Councils keep register of qualified practitioners and supervise medical education and inspect examinations and exercise disciplinary powers over medical practitioners, and also advise local governments in regard to recognition of various medical qualifications.

Dental Council of India—was inaugurated on May 14, 1949 for the development of dental training and practice of the profession through the establishment of the Dental Councils at the Centre and in the States, for the organization of dental services for the people in urban and rural areas.

All-India Council of Post-graduate Medical Education—has been constituted for three years. It will prescribe standards for post-graduate medical education in the universities and offer suggestions to evolve uniformity of standards throughout the country.

Pharmacy Council of India—was inaugurated at Delhi on May 10, 1949 under the Pharmacy Act of 1948. The inauguration of the Pharmacy Council marks a definite and important step in the campaign for the regulation of the quality and purity of drugs made available to the people of this country.

Voluntary Organisations—The following are the important voluntary organisations associated with locall activities—(1) *Indian Red Cross Society,* (2) *St. John's Ambulance Association,* (3) *British Empire Leprosy Relief Association,* (4) *Mission of Lepers,* (5) *Association for the Prevention of Blindness, Bengal,* (6) *Tuberculosis Association of India,* (7) *International Health Division of the Rockefeller Foundation in India.*

Anti-Tuberculosis Campaign—In 1937 a movement was started against Tuberculosis which was assuming an alarming proportion every year. Tuberculosis Association of India was formed to which all provincial associations are affiliated. Many sanatoria have been established throughout India. Government started a B.C.G. vaccination campaign in 1948 and B.C.G. vaccines are being manufactured in India. Central B.C.G. Organisation has been created to direct B.C.G. vaccination campaign. WHO and UNICEF are helping the Government of India in this work.

India and the World Health and other World Organisations—India is a member of the World Health Organisation and her membership fee is estimated at Rs. 650,000. A Regional Bureau of World Health Organisation for South-East Asia has been started at Delhi. W.H.O. has made available to India advisory and demonstration services in the field of malaria, tuberculosis, venereal diseases and maternal child health. *U. N. International Children's Emergency Fund* allocates funds for health programmes in India such as starting Anti T. B. Centres. UNICEF has helped India to set up three T. B. centres in Delhi, Patna and Trivandrum. In 1951 UNICEF made an allocation for development of mass V. C. G., erection of D.D.T. plant, D.D.T. supplies, soap for distribution to health institutions. The total money spent by UNICEF in India upto 1951 is $4,592,000.

Major Diseases of India—The major preventible diseases of India are small-pox, typhoid, dysentery, cholera, and malaria. Malaria is the largest public health problem in India. Deaths from this disease number about a million and the number of cases is about 100 million per year.

Plague first appeared in India at Bombay in 1896 and within a short time the disease spread throughout the country. But there has been considerable diminution within the last decade.

Doctor & Nurses in India—There are in all some 50,000 doctors spread over India. This gives a doctor population ratio of one doctor to 8,000 of population. In United Kingdom the ratio is slightly under 1 to 1,000 nad in U. S. A. 1 to 750 to 800 of population. There are approximately 7,000 trained nurses in India, with a nurse population ratio of 1 to 56,000. In United Kingdom, the ratio is 1 nurse to 300 of population and in U. S. A. it is higher. There are approximately 5,000 trained midwives in India bearing a midwife population ratio of 1 to 80,000 or 1 midwife to 316 sq. miles on a basis of 1 midwife per 100 births where 100,000 are required.

Ratio of Hospitals—It is estimated that there are actually in existence between 73,000 to 74,000 hospital beds of all kinds in India or a ratio of 0·24 beds per 1,000 of population. It is however estimated that in order to provide satisfactory medical service, 7 hospital beds per 1,000 of population are required which would mean provision in the sub-continent of 2,800,000 beds.

Ten Years Health Plan—All-India Health Survey and Development Committee (Chairman, Sir Joseph Bhore) announced on Dec. 25, 1945 a comprehensive ten year natoinal health plan for India costing Rs. 1,000 crores.

The scheme which takes the village as the nucleus for health organisation, provides for:—

1. Primary centres in every village with a dispensary containing 5 beds. Each group of villages with a population of 20,000 to be in charge of a trained doctor with a woman doctor as well as a staff of 34. Each group of three primary centres to have 30 bed hospital; in addition there will be 2 doctors, 2 public health nurses, and 4 midwives at the villagers' homes. Each primary unit is to have a health committee consisting of village workers who will participate in local health measures.

2. Secondary centres for a population of 50,000—60,000 with specialist staff and hospital and laboratory facilities of a higher type than those in the primary centres, whose work they will supervise.

3. District centres with a still higher type of health organisation, each district hospital having 200 beds and being able to provide medical and surgical aid of a high order and obviating the necessity for sending any patient for treatment outside the district.

Provincial Health Departments, while supervising in general the health services of each province, are to interfere as little as possible with primary and secondary organisations and to encourage them to act independently and display initiative in tackling their problems.

The estimated capital expenditure is Rs. 163 crores in first five years and Rs. 200 crores during second five years, with a recurring annual expenditure of Rs. 40 crores during first half and Rs. 81 crores during second half of the programme.

LABORATORIES, MEDICAL RESEARCHES AND ASSOCIATIONS

Indian Research Fund Association (1911)—Is the leading organisation in India concerned with medical research. It is supervised by Advisory Committees. These committees deal with malaria, cholera, plague, malarial mortality and nutrition. The Association approves an annual programme of research, sanctions grants-in-aid for research and in certain cases may constitute special enquiries.

Central Research Institute, Kasauli (1906)—Manufactures vaccine such as anti-typhoid, anti-cholera and anti-venom serum for Civil and Military requirements, also well-known for its research on major epidemics and also endemic diseases. The Institute serves as a centre of reference for anti-rabic treatment. A Rabies Research Centre is being opened here and also a new Anærobic block has been constructed.

All India Institute of Hygiene and Public Health, Calcutta—Established in 1932 with the aid of an endowment from Rockefeller Foundation which provides the scheme with the present building and its initial equipment. The Government of India allow a grant of Rs. 3,00,000 per year. The object of the Institute—(1) the training of public health personnel, qualifying students for public health diploma and (2) pursuits of research on several aspects of public health including study of diseases like malaria, etc.

All India Medical Institute, Delhi—This institute is to be started at Delhi which will serve as a model training and research institution and it should provide best possible training for the teachers and research workers of the future.

Tuberculosis Institute, Delhi—Ministry of Health has started a Tuberculosis Institute at Delhi under the aegis of the Delhi University providing a centre for the tuberculosis research. *Tuberculosis Association of India* with its branches in the States, is the premier organisation which is concerned with the co-ordination of voluntary effect in this field.

Central Drugs Laboratory, Calcutta -The Biochemical Standardisation Laboratory,, Calcutta was converted into Central Drugs Laboratory in 1947 to take up the registration of patent or proprietory medicines under Drugs Act and to analyse samples in case of disputes over standards of products sold or imported into the country.

School of Tropical Medicine, Calcutta (1932)—The School and the Carmichael Hospital for Tropical Diseases which are primarily a research hospital attached to the school are of the status of a provincial institution under the Government of West Bengal, but actually both have an all India aspect. It has the following departments:—(1) Tropical Medicine, (2) Bacteriology and Pathology. (3) Protozoology. (4) Entomology, (5) Pharmacology. (6) Chemistry. (7) Anæmia and respiratory diseases department. (8) Heliminthology. (9) Public Health Laboratory Practice.

Haffkine Institute, Bombay (1900)—The Institute acts as a centre for the manufacture of plague vaccine for the whole of India and centre for the manufacture of anti-rabic vaccine for the whole of India and centre for the manufacture of anti-rabic vaccine for Bombay Presidency.

King Institute of Preventive Medicine, Guindy, Madras (1903-4) —for manufacture of vaccines, therapeutic sera, vaccine lymph, blood bank etc., and also research work.

Pasteur Institute India, Kasauli—Centre of Anti-rabic treatment.

Pasteur Institute of Southern India (1907), Coonoor.

King Edward VII Memorial Pasteur Institute and Medical Research Institute (1907), Shillong.

Pasteur Institute, Calcutta—This institute is a part of School of Tropical Medicine.

Pasteur Institute, Bombay—This is a part of Haffkine Institute, Bombay.

Serological Laboratory—is controlled by the Centre.

All-India Malaria Institute of India, Delhi (1939) -Carries mainly malaria research in India and co-ordinates to a large extent the anti-malarial operations conducted by Central and State Governments.

Imperial Veterinary Research Institute, Mukteswar —Started in 1893. It is now a fully equipped research institute for veterinary research. It also manufactures protective sera and vaccines. It has a branch station at Izzatnagar (Berilly).

Nutrition Research Laboratories, Coonoor—Conducts research on problem of nutrition and acts advisory bureau on all questions for nutrition.

Sir Tata School of Social Service, Bombay —The only institution in India which provides facilities for the training of social workers in the fields of family and welfare, adult deliquency and industrial and labour problems.

Sir Dorabji Tata Trust —The Trust was established in 1940 Tata Memorial Hospital for cancer at a capital of Rs. 23 lakhs and maintained at an average annual cost of Rs. 4 lakhs. There is also Tata Graduate School of Social Work which trains young men and women from universities in social work. It is the first institution of its kind in India.

Medical Colleges

Medical College, Calcutta.
R. G. Kar Medical College, Cal.
Nil Ratan Sarkar Medical College, Calcutta.
National Medical Institute, Calcutta.
Madras Medical College, Madras.
Stanley Medical College, Madras.
Vellore Medical College, Vellore.
Andhra Medical College, Vizagapatam.
Medical College, Guntur, Madras.
Medical College, Madura, Madras.
Agra Medical College, U.P.
Mahatma Gandhi Memorial Medical College, Lucknow.
Lady Hardinge Medical College for Women, Delhi.
Grant Medical College, Bombay.
Seth G. S. Medl. College, Bombay.
Topiwala National Medical College, Bombay.
B. J. Medical College, Ahmedabad.
B. J. Medical College, Poona.
Medical College, Jamnagar, Saurashtra.
Medical College, Nagpur.
Gajra Raja Medical College, Lashkar, Gwalior.
Orissa Medical College, Cuttack.
University Medical College, Mysore.
King George Medical College, Lucknow.
Osmania Medical College, Hyderabad.
Assam Medical College, Dibrugarh.
Prince of Wales Medical College, Patna.
Darbhanga Medical College, Laheria Sarai.
King Edward Medical College, Bettiah.
Swai Man Singh Medical College, Jaipur.
Glancey Medical College, Amritsar.
Mahatma Gandhi Memorial Medical College, Indore.
Armed, Forces Medical College, Delhi.
Medical College, Baroda.

Nursing College

College of Nursing, New Delhi—the first of its kind in India. Five years' course leading to B.Sc. (Hon.) degree of the Delhi University.

CRUDE BIRTH RATE, 1949

(*Number of live births per 1000 mid-year Population*)
Source: U. N. Statistical Year Book 1949-50

S. Africa	26·7	Belgium	17·2	Portugal	25·0
Canada	26·9	Denmark	18·9	Spain	21·4
U.S.A.	24·0	Finland	25·8	Sweden	17·4
Ceylon	39·9	France	21·0	Switzerland	18·4
India (1948)	25·5	Ireland	21·4	U.K.	17·0
Japan	33·2	Italy	20·0	Australia	22·9
Austria	15·8	Netherlands	19·6		

CRUDE DEATH RATE, 1949

(*Number of deaths, exclusive of still births per 1,000 mid-year population*)
Source: U. N. Statistical Year Book 1949-50

Canada	9·2	Denmark	8·9	Norway	8·8
U.S.A.	9·7	Finland	11·3	Portugal	13·9
Ceylon	12·6	France	13·8	Spain	11·4
India (1948)	17·2	Ireland	12·7	Sweden	10·0
Japan	11·6	Italy	10·4	Switzerland	10·7
Austria	12·6	Netherlands	8·1	U.K.	11·7
Belgium	12·9				

INFANT MORTALITY, 1949

Deaths per 1,000 live-births
Source: U. N. Statistical Year Book 1949-50

South Africa	40·1	Austria	75·6	Netherlands	26·8
Canada	42·8	Belgium	57·2	Portugal	114·5
U.S.A.	31·1	Finland	48·3	Spain	74·1
Ceylon	87·0	France	56·0	Sweden	23·2
India	123	Ireland	51·5	Switzerland	34·3
Japan	62·0	Italy	74·1	U.K.	34·1

MARRIAGE RATES

(Number of marriages per 1,000 inhabitants)
Source: Monthly Bulletin of Statistics, U. N. July, 1951

	Australia	*Canada*	*Ceylon*	*France*	*W. Germany*	*Ireland*	*Israel*
1937	8·7	8·0	6·1	6·7	..	5·0	12·4
1938	9·0	7·9	6·1	6·7	9·4	5·1	11·1
1948	9·7	9·6	6·3	9·1	10·6	5·4	11·1
1949	9·2	9·2	6·3	8·2	10·2	5·4	12·8
1950	9·2	9·0	6·8	8·0	10·6	5·4	14·0

	Italy	*Netherlands*	*Sweden*	*Switzerland*	*U.K.*	*U.S.A.*
1937	8·7	7·7	8·9	7·3	8·6	11·3
1938	7·5	7·7	9·2	7·4	8·6	10·3
1948	8·3	9·0	8·4	8·5	9·0	12·4
1949	7·6	8·3	7·8	8·0	8·5	10·6
1950	7·5	8·2	7·6	8·0	8·0	11·2

TUBERCULOSIS DEATH

(Per 100,000 population)
(From Indian Medical Gazette, Oct. 1941)

London	96	Berlin	120	Madras	290
Paris	177	Kanpur	432	Bombay	140
Mexico	170	Lucknow	419	Calcutta	230
New York	128				

BIRTH RATES, DEATH RATES AND INFANT MORTALITY IN INDIA

	Birth per 1,000 *population*	*Death per* 1,000 *population*	*Infant.Mortality per* 1,000.*live births*
1938	33·3	23·7	167
1939	32·7	21·6	156
1940	32·0	21·1	160
1941	32·1	21·9	158
1942	29·5	21·4	163
1943	26·1	23·9	165
1944	25·8	24·5	169
1945	28·0	22·1	151
1946	28·9	18·7	136
1947	26·6	19·7	146
1948	25·4	17·2	130
1949	26·7	16·0	123

BIRTHS AND DEATHS IN INDIA

(In thousands)

	Total births	*Total deaths*		*Total births*	*Total deaths*
1938	.. 9,398	6,685	1944	.. 7,708	7,307
1939	.. 9,346	6,165	1945	.. 8,374	6,609
1940	.. 9,284	6,122	1946 *	.. 7,654	4,956
1941	.. 9,426	6,413	1942	.. 6,406	4,737
1942	.. 8,715	6,336	1948	.. 6,196	4,168
1943	.. 7,776	7,109	1949	.. 6,762	4,044

* Excluding the area subsequently formed part of East Pakistan.

PUBLIC HEALTH STATISTICS

	1925	1929	1933	1937	1939	1940	1941	1942
Hospitals & Dispensaries . ..	3,753	4,439	4,869	5,285	5,650	5,885	..	..
Patients treated (000) ..	39,424	51,640	62,618	71,057	79,057	81,815	..	..
Birth rate *per mile* ..	32	33	36	35	34	33	32	29
per 1000 live-births ..	174	178	171	162	156	160	158	163
Expenditure on Public Health by Central & Prov. Govts. (Rs. lakhs)	5,01	5,99	4,96	5,63	5,74	6,32	6,31	..
Mortality for Cholera, Small-Pox & Plague *per mile*	1·3	21·8	0·9	0·7	..	..	1·0	·9

PROHIBITION IN INDIA

Prohibition—During 1951 prohibition existed in varying degrees in the different States of India. Total prohibition was in force in some States, partial in others, yet some States did not enforce it.

Total prohibition was in force in 1951 in Bombay and Madras.

Travancore-Cochin which had already 11 taluks completely dry introduced prohibition in two more taluks during 1951. To achieve better results, Mysore gave up the original scheme of progressive reduction in the number of shops and took up complete prohibition by districts. Out of nine districts in the State, five districts and a few taluks are completely dry now. Opium smoking is prohibited throughout the State except licensed persons who are confirmed addicts. During 1951 Uttar Pradesh consolidated prohibition in the existing dry areas—11 districts and 3 religious centres. In Madhya Pradesh prohibition has been in force in about half the area of the State. As the result of the measure was in question, Government appointed a fact-finding Committee of non-officials to enquire into the various aspects of the policy of prohibition.

In Assam total prohibition of opium except on medical grounds, continues to be in force. In Punab, West Bengal and a few other States every week a day is dry. In some other States import, sale and use of liquor are discouraged. In almost all the States, juveniles are prohibited from the use of any kind of inebriants.

SCIENTIFIC & INDUSTRIAL PROGRESS IN INDIA

Role of Indian Scientists—India occupies an honourable place in the realm of science althongh the number of workers is much less than it should be when the size and population of the country is taken into account.

Indian can boast of Nobel Prize winner in Physics in Sir C. V. Raman, the famous discoverer of "Raman effect", significant work has been done by Sir C. V. Raman and his collaborators at Bangalore on the dynamics of crystals like diamond, rock salt and quartz. Work on optics has recently been intiated in the newly created Raman Research Institute at Bangalore, of which he is the director. Other famous scientists are Sir J. C. Bose who won renown by his work in plant physiology, S. Ramanujam, the mathematical prodigy of India, Dr. M. N. Saha for thermal ionization and radiation, late Dr. Birbal Sahni, an authority in paleobotany, who carried interesting work on the age of salt ranges of the Punjab. From an examination of micro-flora or minute fossil plants embedded in the mighty walls of white salt, he was able to determine the period of their formation. Dr. K. S. Krishnan, famous for his work on magnetism, H. J. Bhaba whose work on the cascade theory and ionisation of showers has won for him international reputation, P. C. Mahalanobis of statistics fame, S. S. Bhatnagar, well-known for his work on colloids, emulsion and magneto-chemistry, Sir P. C. Roy for his work on mercury nitrates, S. N. Bose of Bose-Einstein statistics fame, T. S. Venkataraman, the sugarcane expert, Sir J. C. Ghose, J. N. Mukherjee on colloid chemistry and soil research, Dr. Chandrasekhar's contribution to astronomy and astrophysics, K. Venkataraman's researches on dyestaffs, D. M. Bose famed for research work in magnetism. There are also number of Fellows of the Royal Society.

In the field of medical science, India was the first country to discover that micro-organisms responsible for malaria and transmitted by mosquitoes. The diagnosis, prevention and cure of kala-azar have been made possible by the work of the late Dr. U. N. Brahmachari; Dr. R. N. Chopra has investigated the cictine principle of Indian medicinal plants and their pharmacological action.

India's International Contacts in Science—India is a member of the International Council of Scientific Unions and of eleven individual Scientific Unions. The work of the Indian Scientists have been recognised and many of them have been appointed to various organisations under the International Scientific Unions. India's views on the various scientific bodies are thus fully represented. Indian scientific delegations are regularly sent to a number of International Conferences, through which Indian scientists receive regular information from abroad on the latest developments in specialized subjects. The honour of holding the first Pan-Indian Ocean

Science Congress in 1951 fell to India. Another International Conference held in India in 1951 was that on Elementary Particles at the Tata Institute of Fundamental Research, Bombay.

The *Indian Scientific Liaison Officer* with the Indian High Commissioner in London obtains information from Britain and European countries on technical subjects required by our research laboratories, universities and scientific institutions. In most cases, this kind of information can not be obtained through the ordinary channels. The Scientific Liaison Office helps the movement of scientists within the Commonwealth and provides adequate facilities for Indian scientists and others visiting U.K. and European countries.

Ministry of National Resources and Scientific Research—From June 1, 1948 Department of Scientific Research was set up under the charge of the Prime Minister. The name of the department has been changed and it has been placed under a separate minister. The new name of the department is Ministry of National Resources and Scientific Research. It deals with the following subjects—(1) Scientific Research, (2) Mines, (3) Power, (5) Irrigation.

Council of Scientific & Industrial Research—was established in 1942. This is the central organisation whose activities relate directly to the promotion of industry. This Council has now been reconstituted with the responsibility of utilising the scientific latent of the country in the interest of national development and well-being. The Council has been setting up a chain of National Research Laboratories which will fill the gap between science and industrial development. These research laboratories are now located in different parts of India, *i.e.*, National Physical Laboratory at Delhi, National Chemical Laboratory at Poona, National Metallurgical Laboratory at Jamshedpur, Central Glass and Ceramic Research Institute at Calcutta, Fuel Research Institute at Dhanbad, Central Leather Research Institute at Madras, and Central Electro-Chemical Research Institute at Karaikudi (Madras), Central Food Technological Institute, Mysore, Drug Research Institute, Lucknow and two stations for Building Research and Road Research, Delhi and Roorkee has been started.

Administration—The administration of the Council is vested in the governing body presided over by the Prime Minister with the Minister of Industry and Supply as Vice-President. The President is vested with wide powers in matters of finance with the sanctioned budget allotment by the constitution and by delegation. Principal Administrative Officer of the Council is the Director, Scientific and Industrial Research.

Organisation—The Council of Scientific and Industrial Research is an autonomous body which is assisted in its deliberations by three advisory bodies—(1) *Board of Scientific and Industrial Research.* (2) *Board of Research in Atomic Energy* and (3) *Industrial Liaison Committee.*

Board of Scientific and Industrial Research—is composed of 23 members and functions as an Advisory Body to the Council on (1) proposals for instituting specific researches (2) for scientific institutions. (3) for establishment of research institutes, studentships, scholarships and (4) proposal for specific studies and surveys for indigenous resources. In the discharge of these functions, the Board is assisted by 24 Researches Committees of experts dealing with different subjects.

Board of Research in Atomic Energy—(1) A Board of Research in Atomic Energy has been formed to advise the Government and the

Scientific and Industrial Research Council on all matters pertaining to the development of Atomic Energy in India. The beach-sand of Travancore abound in *thorium* which is an important raw material for the production of atomic energy and with a view to conserving the national asset the Government had to ban its export. (2) An Atomic Energy Act has been passed in 1948 giving the Government of India control over all matters connected with atomic energy development in the country.

Under Clause 13 of the Atomic Energy Act, Government of India have set up the *Atomic Energy Commission* with the following objects (1) to take such steps as may be necessary from time to time to protect the interest of the country in connection with atomic energy. (2) To survey the territories of the Indian Union for the locations of useful minerals in connections with Atomic Energy. (3) To promote research in their own laboratories and to subsidize such research in the existing Institutions and Universities.

Recently Atomic Energy Commission in course of extensive surveys undertaken by it for locating all deposits and assessing the country's resources of atomic energy minerals such as uranium, thorium, beryl and monasite, have discovered two uranium bearing belts in eastern and central India. Government are also going ahead with their plan for processing the minerals. In regard to monozite, a factory capable of processing 1,500 tons of monozite is being set up at Alwaye. *The Indian Rare Earths Ltd.*—a company financed jointly by the Government of India and the Government of Travancore-Cochin has been floated for the purpose. In regard to the manufacture of berylium and its alloys, a pilot plant is being set up in the National Metallurgical Laboratory, Jamshedpur. The construction of a small atomic pile for experiment purposes and for the production of radio-active isotopes and bye-product is one of the main short term objectives of the Commission. Atomic research is being undertaken by the Commission. Tata Institute of Fundamental Research has been chosen by the Commission as the centre for its large-scale undertakings.

Industrial Liaison Committee—is composed of six members including two industrialists. It advises the Council on matters connected with (*a*) utilisation of the results of research scheme. (*b*) Division of royalties between Council and scientists concerned and between scientists themselves and (*c*) generally the best method whereby the industrial development and research can be undertaken and services of scientists rewarded.

Works of the Ministry of National Resources and Scientific Research—The notable achievements of this Department are as follows:—

(1) Indian Scientific Liaison Office with an Indian Scientific Liaison officer has been set up in London for collecting valuable scientific information for dissemination throughout India. The object is to keep abreast of the latest improvements in scientific techniques and to facilitate exchange of scientific information and experimental material.

(2) Department has given grants-in-aid totalling Rs. 1,821,000 including fellowships for the study of nuclear physics.

(3) It has created a National Research Professorship of physics at the Indian Academy of Sciences, Bangalore which is now held by Sir C. V. Raman.

(4) The department carries out work in connection with India's membership of the International Council of Scientific Unions and other International Scientific Commissions.

(5) A National Committee of Type Culture has been set up to save the needs of industry and research by making available pure type cultures of micro-organisms of industrial importance.

(6) The Department through the Atomic Energy Commission is making survey of the country for location of atomic energy movements.

Engineering Research—The inauguration of the *Board of Engineering Research* in 1950 is an important step in the practical application of scientific research. The Board of Engineering Research has been charged with the duty of initiating and coordinating research in various engineering subjects. It has set up Five Expert Committees dealing with different subjects. It has also decided to conduct a survey of the facilities available in existing institutions and the problems awaiting solution both with the industry and state governments.

Technological Institutes—Setting up of four technological institutes in Bombay, Madras, Calcutta and North India on the lines of the Massachusetts Institute of Technology, U.S.A., has been sanctioned and which will not only increase the supply of technical and scientific personnel of India but will go a great way towards the Scientific and Technological development of the country. The four institutions, each of which has been planned to have 3,000 students at a time, are estimated to cost Rs. 12,00,00,000 non-recurring and about Rs. 5,00,00,000 recurring annually. One institution has already been started at Hijli (Khargpur) in 1951 and another is being started at Kurla.

National Register of Scientific and Technical Personnel—The work of compiling a National Register of Scientific and Technical Personnel in India has been entrusted by the Government of India to the Council of Scientific and Industrial Research. The purpose of the National Register is to ensure effective utilisation of scientific talent. The country needs a large number of scientific personnel of different catagories for its defence and planned economy. The National Register will help to take a census and collect statistical data about available man power.

Scientific Man-power Committee—The Government of India appointed in 1947 the Scientific Man-power Committee to assess the country's requirements in scientific and technical in power. The Committee's Report was submitted in July 1948 which found the overall requirements in the country for next five to ten years, 54,000 engineers and 20,000 technologists and that the available resources of training were hardly sufficient to meet over 50 per cent of the needs. As recommended by the Committee three important schemes, such as industrial training, research training and improvement and expansion of facilities in universities were put into operation

Dictionary of Economic Products—An important development in the field of scientific research in the publication of "Wealth of India" as the dictionary of economic products and industrial resources of India has been styled. This publication gives uptodate information about Indian raw materials and industries and represents the immense task of collecting and presenting the latest position about 4,000 different articles.

Industrial Research—Industrial research on a co-ordinated basis made its first appearance in 1934 when *Indian Industrial Research Bureau* came into existence. In 1942 Council of Scientific and Industrial Research was set up. This Council established eleven National Laboratories for industrial research.

(1) *National Physical Laboratory, Delhi*—It will have eight divisions dealing with weights and measures, applied mechanics and materials, heat and power, optics, electricity, electrons and sound, industrial physics, hydraulic research and analytical chemistry. It was opened on January 21, 1950.

(2) *National Chemical Laboratory, Poona*—This laboratory was opened in 1950 and will have seven main divisions devoted to inorganic chemistry, physical chemistry, chemistry of high polymers, organic chemistry, bio-chemistry, chemical engineering and survey and intelligence.

(3) *National Metallurgical Laboratory, Jamshedpur*—was opened on 26th Nov. 1950. Besides metallurgical research, it will undertake research on ores, minerals and refractories as applied to metallurgy. A noteworthy feature will be t' : laboratory's collaboration with the Tatas.

(4) *Fuel Research Institute, Digwadih, Dhanbad*—was opened on April 22, 1950. The institute will conduct research on major problems concerning fuel—solid, liquid and gaseous—and will operate a physical and chemical survey of Indian coals, the object being to provide a reliable assessment of the quality and quantity of the various coal resources of the country in order to ensure that they are utilised to the best advantage. In addition to problems of fundamental and applied research, sampling and analysis of coal will be undertaken and pilot-plants are to be developed for various processes.

(5) *Central Glass and Ceramic Research Institute, Calcutta*—has been opened on 26th August, 1950. The Institute will conduct fundamental research bearing on different branches of glass ceramics. Its other functions will be testing and standardization, technical assistance to the glass and ceramic industry; dissemation of information and training of technologists for special work. It is proposed to set up a pilot for optical glass manufacture; a sand-washing plant has already been installed. Research work on multi-cellular glass and coloured glass in under way.

(6) *Central Road Research Institute, Delhi*—will include the following work—study of the technique of construction and maintenance of roads with due regard to the use of indigenous materials, survey of Indian soils with the object of evolving chief rural roads, investigation of problems of road safety, development of an improved type of rural vehicle which would be less destructive to rural roads.

(7) *Central Building Research Institute, Roorkee*—A Building Research Institute was established at Rookee in 1947 to deal with problems such as construction of low cost houses and utilisation of cheap construction materials. It is proposed to extend the acitvities of this unit and establish a Central Building Research Institute here.

(8) *Central Food Technological Research Institute, Mysore City*—Mysore State have given free one of the biggest palaces for the location of this institute. It was opened on 21st October, 1950. The laboratory will consist of three main divisions dealing with food processing, food engineering and biochemistry and nutrition and seven subsidiary sections for handling problems in food storage and preservation, food substitute and supplementary foods, raw materials and food survey dietics and field studies, food containers, food adulteration and food sanitation. In 1950 Indian Institute of Food Technology was merged with it. This Division is also charged with the all-India post-graduate diploma course in fruit technology.

(3) *Central Drug Research Institute, "Chattar Manzil", Lucknow,*

—donated by the Government of Uttar Pradesh. This Research Institute is being set up with five main divisions with chemistry, botany, pharmacology, biochemistry and microbiology and clinical science.

(10) *Central Leather Research Institute, Madras*—Sections will be devoted to leather testing, chemistry, bacteriology, microscopy and physics. There will also be a model research tannery, a pilot plant for tanning extraction and glue manufacture and a workshop.

(11) *Central Electro-Chemical Research Institute, Karaikudi (Madras Presidency)*—Research of an applied character with a view to enlarging the production capacity and efficiency of existing industries and fostering new industries based on Indian raw materials will be the main function of the Electro-Chemical Research Institute. To start with, there will be two main divisions—electrolytic and electrothermic. In addition, it is proposed to set up ancillary laboratories consisting of analytical, chemical engineering, testing and standardisation and electronotic sections.

Textile Industry of Ahmedabad has started *Textile Industry's Research Association* and is establishing its own Research Institute. Indian Jute Mills Association of Calcutta has its own *Jute Technological Laboratory* while Tata Iron and Steel Co. have set up up-to-date research section for metallogical research.

Medical Research—The subject of medical research was the first to receive attention and in 1922 *Indian Research Fund Association* was brought into being with the object of sponsoring research in subjects relating to medicine and public health. Among the specialised institutes catering to research and public health, the following may be mentioned—

(1) Central Research Institute, Kasauli; (2) School of Tropical Medicine, Calcutta; (3) Haffkine Institute, Bombay; (4) King Institute, Guindy, Madras; (5) All-India Institute of Hygiene and Public Health; (6) Malaria Institute, Delhi; (7) Nutrition Research Institute, Coonoor; (8) Pasteur Institutes at Kasauli, Shillong and Coonoor.

Agricultural Research—It has its beginning in 1929 with the starting of *Indian Council of Agricultural Research*—The primary function of the Council is to promote, guide and co-ordinate agricultural including veterinary research. The Council's work has been enlarged to include the work connected with the application of the results of research to field practice and to undertake, aid, promote and co-ordinate agricultural and animal husbandry education, research and its application in practice, development and marketing by all means calculated to increase scientific knowledge of the subjects and to secure its adoption in every day practice.

The Council is divided into two parts—governing body which examines all proposals in connection with the scientific subjects. Government contribute financial grants every year and a cess of ½ p.c. *ad valorem* is levied under the Agricultural Produce Cess Act of 1940 to provide funds for agricultural research programme.

The following are the main agricultural Institutes of India—(1) Forest Research Institute, Dehra Dun; (2) Indian Agricultural Research Institute, Delhi; (3) Indian Veterinary Research Institute, Mukteswar and Izzatnagar; (4) Indian Dairy Research Institute, Bangalore; (5) Sugar Research Institute, Coimbatore; (6) Central Rice Research Station, Cuttack; (7) Cotton Technological Research Laboratory, Matunga, Bombay and its substation at Indore; (8) Central Jute Technological Research Laboratory, Calcutta; (9) Jute Agricultural Research Institute, Hooghly; (10) Indian

Lac Research Institute, Ranchi; (11) Central Tobacco Research Station, Guntur; (12) Central Tobacco Research Institute, Rajahmundry; (13) Bidi Tobacco Research Station, Anand; (14) Central Inland Fisheries Research Station, Barrackpur; (15) Central Marine Research Station, Madras; (16) Deep Sea Fishing Research Station, Bombay.

Scientific Surveys—There are Survey of India (1800), Geological Survey (1851), Botanical Survey (1889), Zoological Survey (1916) which are doing splendid scientific work for the cause of science in India.

Institute of Neclear Physics, Calcutta —This is the first of its kind in Asia and was opened on Jan. 11, 1950 by Madame Joliot-Curie. Its present modest programme is the training of students and carrying fundamental research on different types.

INDIAN MINERALS

India's Mineral Resources —The mineral resources of India are not large for a country of its size and population. Only coal, gold, mica, building materials (including constructional stones, limestone, etc.), salt, petroleum, manganese ore, iron ore, copper ore and ilmenite are produced in quantities to be of real importance to industry and other sectors of economy. Of these mica, manganese ore and ilmenite are wholly or largely exported. The important non-ferrous metals are either not produced in India at all or their production is insignificant. Less than 12 per cent of India's requirements of mineral oils is now met by domestic production; the rest being imported. India has however adequate resources of industrial clay, bauxite, steatite, chromite, natural abrasives, magnestic, felspar, dolomite phosphate, vanadium, titanium ore etc. for its immediate and future needs.

The growing importance of Indian mineral industry is clear from the fact that her annual production of minerals is now valued at over Rs. 75 crores as compared with Rs. 19 crores as recently as 20 years ago.

India's Mineral Defects—The distribution of minerals in India is very localised. The main coal-fields are situated in Gondawana region (Bengal, Bihar, Orissa); oil-field is located in Assam. Iron-ores are also mainly centred in one place; other minerals such as borax, sulphur, magnesite, ilmenite, gypsum are scattered far and wide. This sort of scattering distribution of minerals makes co-ordination of production and distribution impossible. India lacks the base metals; her known deposits of tin, lead, copper and zinc being modest. But her most serious deficiency is oil. Her production on the Burma frontier is 1·10 p.c. of world's output. Yet it must be said that in some minerals, India holds a record position.

Minerals of Strategic Importance—Minerals of strategic and defence importance can be regarded as adequate in India although in parts only; there is a serious deficiency in munition metals like tungsten, tin, lead, zinc, mercury and also in graphite and liquid fuels. But in the basic metals, iron, manganese, aluminium, magnesium and chromium, the country is well supplied, in the first three in large excess.

Four Categories of India's Mineral Resources —The mineral resources of India can be divided into four categories—(1) minerals of which India's exportable surplus can dominate world market, (2) minerals of which the exportable surplus forms an important factor, (3) minerals in which it appears the country is at present self-sustaining and (4) minerals for which India has to depend largely or entirely on foreign imports. To the first category belong iron ore, titanium ore and mica, while the exportable surplus under the second head includes manganese ores, bauxite, magnesite, refractory minerals, natural abrasives, steatite, silica, gypsum, monumental granites, monazite, corundum and cement materials. In the number of minerals including coal, aluminum ore, mineral pigments, sodium salts and alkalies, rare earths, berylium, glass sand, nitrates, zircon and phosphates, the country is known to be self-sufficient. And lastly, the following are the minerals for which it has to depend solely on imports: copper, silver, nickel, petroleum, sulphur, lead, zinc, tin, fluorides, mercury, tungsten, molybdenum, platinum, graphite, asphalt and potash.

Mines and Minerals Conservation—With the achievement of independence, Government of India felt the great need of statutory rules for the conservation of mineral wealth and for the regulation and grant of mineral concessions. Thus the *Mines and Minerals (Regulation and Development) Act* was passed in September 1948. The Central Government assumed the responsibility to co-ordinate the policy of states for mineral development and the issue of leases. The Central Government is also following an active mineral policy to control mining and the consumption of minerals of fundamental and strategic importance.

The Industrial Policy Resolution of the Government of India published in April 6, 1948, explicitly recognised minerals amongst the industries whose location must be governed by economic factors of all-India import or which require considerable investment or a high degree of technical skill and must consequently be the subject of central regulation and control.

Government Departments—*The Ministry of Naturat Resources and Scientific Research* deals with (1) mines, (2) geological survey among other subjects. The Geological Survey department was founded in 1846 primarily with the object of geological mapping. This department helps to increase India's mineral resources. It has been publishing various technical records and bulletins giving geological information on commercial and other minerals. Enquiries from industrialists are being answered by its information section.

The activity of the department is also directed to the compilation of a geological map of India and to the collection and dissemination of information regarding the mineral resources of the country. The department is responsible for the up-keep and administration of the geological section of the Indian Museum, Calcutta.

The following are also the important departments concerning mining in India—

Mineral Information Bureau has been set up in 1946 to give information and advice to industries. The main function of the Bureau is the dissemination in non-technical language of facts relating to Indian minerals, fuels, iron ore, ferro-alloy minerals, light and base metal minerals, precious metals, gems, minerals for chemical industries, industrial clays, sands and miscellaneous minerals.

Indian Bureau of Mines was created in 1948 to function as a body of expert advisers to the Government of India on all matters relating to mineral development. The Bureau is today the chief national agency for discharging the various duties devolving on the Central Government under the Mines and Minerals (Regulation and Development) Act, 1948. Bureau of Mines will have to inspect mines to effect general improvements in mining methods, plan for the recovery of the largest possible quantity, to conserve mineral wealth, eliminate waste in mining, processing and utilization; use modern methods of prospecting to locate mineral deposits; advise central and provincial governments on questions relating to mineral concessions, royalty rents, taxatioon, tariff and export policies, provide analytical and testing facilities for producers of and traders in minerals etc.

This Bureau consists of following three sections—(1) *Mining Engineering Branch,* (2) *Mines Inspection Branch,* (3) *Mineral Treatment Branch.*

Department of Mines—This department came into existence in 1902 and is mainly responsible for the Indian Mines Act. Headquarters of the department is at Dhanbad. This department is concerned with the inspecting mines, safety of underground workers, wages etc., and mining education of the country.

History of the Geological Survey and its activities—The Geological Survey of India, the department that looks after minerals of India celebrated its first hundred years in 1951. During that period, it has not only added materially to our knowledge of minerals of economic value, and so to the potential and actual wealth of the country, but extended the bounds of research into the science of the earth.

During its long history, the Geological Survey has been devoting its energy in the scientific geological survey of mineral deposits for the detailed knowledge of the geology of the different areas with the estimation of their quantity and quality. Further geological survey has had as one of its main objectives the preparation of a Geological map of India; and except for a few unmapped areas in Orissa, Bastar, Assam and parts of Himalayas, the geological map of India has now been completed on one scale or another.

On the purely scientific research side, its discoveries have often had significance that has extended beyond the boundaries of India—(1) the discovery that glacial boulder beds and peculiar fossil glossopteris flora were common to S. America S. Africa, India, Australia and Antartica led to the conception of a great southern continent of Gondawana land covering what is now partly sea, (2) three main types of wave motion occur during an earthquake, (3) wonderful variety of fossil mammals buried in the Siwalik hills and in the mountains of Baluchistan, (4) Great advances towards the knowledge of the Himalayas revealing the complicated structure of the great mountain.

The Department's work is now organized in three main divisions. The first consists of the Field Circles, which are responsible for detailed mapping and for all preliminary investigations of mineral deposits, water supply and engineering problems. The second consists of the Technical Sections maintained at Calcutta headquarters; the Chemical, Petrological, Palaeontological and Palaeo botanical laboratories, the Geophysical Workshop, the Drawing Office, the Mineral Information Bureau, the Statistical Section and the sections responsible for general administration. The third consists of the Specialist Sections, which are available for work in any part of India. These sections are responsible for advanced studies in engineering geology and water supply, and for detailed testing of mineral deposits by geophysical methods, drilling or exploratory mining. These three divisions naturally work in close collaboration; when the mineral deposits of an area have been generally appraised by the Field Circles, and found promising, detailed testing by one or other of the Specialist Sections is carried out.

Mining Education —*The Indian School of Mines and Applied Geology* at Dhanbad impart high grade technical training in Mineral Engineering and Applied Geology and offers a four-year diploma course in these subjects. The school has been thoroughly reorganised on the recommendations of the Reorganisation Committee. The new curriculum lays special emphasis on subjects like metallurgy, fuel technology, refractories and ceramics.

National Mineral Policy —The Industrial Policy Resolution of the Government of India published on April 6, 1948 explicitly recognised minerals amongst industries whose location must be governed by economic factors of all-India import or which require considerable investment or a high degree of technical skill and must consequently be the subject of central regulation and control.

Three major steps have since been taken to put the new policy into execution. A five-year expansion programme for the Geological Survey of India envisages a considerable increase of its staff and range of work. The present strength (1951) of 150 Geologists is to be increased to 275 during five-year period. The cost of expansion is estimated at one crore of rupees.

The Dhanbhad School of Mines and Applied Geology has been reorganised to turn out a larger number of technicians every year. In March, 1948, the Indian Bureau of Mines was created to function as a body of expert advisers to the Government of India on all matters relating to mineral development. In September, 1948 the Indian Parliament gave its assent to a historic measure—the Mines and Minerals (Regulation and Development) Act, 1948.

The Act applies to all minerals, including oil. It extends to all States, including Centrally-administered areas. It gives powers to Central Government to frame rules for the regulation of the terms and conditions of prspecting licences and grant of leases, for the conservation and development of minerals, and for the modification of existing licences and leases on payment of compensation. The ownership of mines and minerals continues to vest in the States, and State Governments will continue to grant concessions and collect royalties and rents as hitherto. But this will now be done within the framework of the general control exercised by the Centre and the rules framed by the Central Government.

DESCRIPTION OF MINERALS

Coal—is the most valuable mineral product and India stands eighth in the world. The bulk of Indian coal is concentrated in one enormous series of deposits known as 'Gondwana system.' A little over 98 p.c. of Indian coal is raised from gondwana coal beds and about 2 p.c. from tertiary beds. This system stretches across Bengal, Bihar, Orissa, Central India and Madhya Pradesh and Hyderabad. The tertiary beds are found in Assam and Rajputana. A little coal is also produced in Hyderabad. The coal found, broadly speaking is of three types: lignite, bituminous and anthracite. The coal-fields of Bihar and West Bengal account for about nineteenth of India's output. Jharia and Raniganj are the principal coal-fields and from them about 72 p.c. of total output is obtained. Jharia coal-field produces the best Indian coal. In Hyderabad, the principal coal field lies in Singarani, 146 miles from Hyderabad. Largest market for Indian coal is home market.

The total reserves of coal down to a depth of 2,000 feet are estimated at 65,000 million tons, of which the 'actual reserves' (*i.e.* those which are proved or considered beyond reasonable doubt to exist) are 4,987 million tons and the rest are 'probable reserves'. Reserves of good coking coal has been estimated at a little over 1,600 million tons.

Coal mining as a commercial enterprise may be said to have begun in 1774 in Raniganj field. In Bengal and Bihar Zamindars had the power to grant mining leases. There was no uniformity in royalty resulting often in unfair competition between collieries. The situation called for statutory resolution. In 1948 the Indian Parliament passed Mines and Minerals (Regulation and Development) Act. The Mining Concessions Rules 1949 issued under the Act came into force on October 25, 1949.

There are three types of Collieries: Large collieries privately owned, small collieries privately owned and large collieries State owned.

Great improvements have been made by the government on the conditions of labour—such as, a *compulsory provident fund* scheme which will provide for about 250,000 coal miners in old age, has been brought into force by the Government of India. *A Coal Mines Labour Welfare Fund* was constituted in 1944 which provided for the levy of cess on coal and coke despatched from collieries. A *Standing Industrial Tribunal* for coal areas has now been constituted by the Government of India to deal with disputes which are within the jurisdiction of the Central Government.

Following important points are to be noted with regard to coal enterprise in India (1) The Central Government have declared the coal industry a public utility service. (2) Per capita production in India is far lower than in some western countries. (3) Indian Railways consume the largest amount of coal in India.

India has now nearly 1,000 coal mines. The total output of coal at present is in the neighbourhood of 30 million tons; of the total production Bihar accounts for 55 per cent., Bengal 28 per cent., C.P. 6 per cent, Eastern States 5 per cent., Hyderabad 4 per cent., etc. of these 30 million tons, about a third is consumed by railways, a fourth by metallurgical and other industries and a tenth for domestic purposes.

A Fuel Research Institute at Digwadih, near Jharia has been started in 1949. The function of the Institute is to make survey of Indian coals and to carry out researches on processing with a view to manufacturing metallurgical coke and investigation on low-temperature carbonisation and tar distillation for dyes, drugs, plastics, explosive and synthetic liquid fuels.

Manganese—Next in importance to coal is *manganese,* one of the key metals. Its chief use being in the manufacture of steel. It is also extensively used in the chemical industry and in making of dry cell batteries. India is third among the countries producing manganese—U.S.S.R. and Gold Coast being first and second respectively. Deposits now being worked are in Singhbhum (Bihar), Panchmahal (Bombay), Balaghat, Bhandara, Chhindwara, Nagpur (Madhya Pradesh), Indore (Madhya Bharat), Vizagapatam, Sundur (Madras), Shimoga (Mysore), Bonai, Koenjhar, Koraput, Patna State (Orissa) and Banswara (Rajasthan). Ore supplies are abundant. Madhya Pradesh produces more than 60 p.c. of the ore in India. Principal customers of manganese are United Kingdom, France, U. S. A., Norway, Canada and Belgium.

Gold—takes the third place which in India is mined in the State of Mysore in Kolar where 95 per cent. of Indian output of gold comes. India's production of gold is only about two per cent. of the total world production (excluding U. S. S. R.). Alluvial gold is found with sands in some of the rivers of India—such as rivers of Singbhum, Orissa etc.

India's Gold Production

	In thousands of fine ounces		In thousands of fine ounces
1939	317	1945	168
1940	289	1946	132
1941	286	1947	172
1942	256	1948	180
1943	252	1949	164
1944	188	1950	197

Source: *Report of the Currency and Finance 1950-51*

Mica—Fourth place is occupied by *Mica*. India is the biggest supplier of mica and is responsible for three-quarters of the world's production of block and sheet mica. Bihar belt is the oldest and the most important of the areas producing mica in India. The best variety of mica *viz.*, Bengal Ruby mica comes mostly from the Bihar mines which are scattered over Hazaribagh and Gaya district of Bihar. The second mica belt is in the Nellore district of Madras. The main use of mica is for the electrical and technical industries. The next important use of mica is in the shape of micanite by electrical engineers, colliery companies, manufacturers of iron, steel and electrical apparatus. Waste and scrap mica is ground and used for wall-paper industry, manufacture of paints, rubber industry etc. The average annual export of mica from India is 11,250 tons valued at Rs. 217 lakhs.

Petroleum—is the last of five great minerals of India. India contributes only 1·10 per cent. of the world's production. The production comes from the Digboi field of the Assam Oil Company in Assam. This covers an area of 2½ sq. miles. About 74 p.c. of India's requirements of petrol comes from Persia, while the indegenous production amounts to 8 per cent. The other countries from which India gets her petrol are Bahrein Islands, Saudi Arabia and the Far East. The quantities imported during 1949 and 1950 are 168 m. and 184 m. gallons respectively.

Iron—Extensive deposits of iron ore occur in several parts of India, namely Bihar, Orissa, Madhya Pradesh, Mysore and Madras. Of these, the deposits in the Singbhum district of Bihar and in the adjacent areas of Bonai, Keonjhar and Mayurbhanj, which have now merged with Orissa, are the most important, being the largest in extent as well as richest in iron content. The estimated iron reserves are as follows:—*Singbhum and Orissa*—8,000 million tons: iron content 60-68 p.c. *Drug Dist.* (Madhya Pradesh)—175 million tons: iron content 60-68 p.c. *Chanda District* (Madhya Pradesh)—30 million tons: iron content 60-68 p.c. *Mysore*—150 million tons: iron contents 55-65 p.c. *Madras* (Salem District)—305 million tons: iron content 35-40 p.c.=total 9,270 million tons. So it will be seen that iron content in Indian one is about 68·7. Few even the greatest production countries of the world can claim a higher percentage.

Salt—Inspite of per 3,500 miles of coast line and vast tracts which could be developed for the production of salt, India imports on an average one crore maunds of foreign salt every year. In India the manufacture of salt is almost exclusively by the solar evaporation. The progress of salt production has been noteworthy. In 1930-31 production was only 1·21 million tons and by 1948 it had very nearly doubted to 2·33 million tons.

The main producing centres of salt are—(1) *Inland sources* of Rajasthan —Kaharaghoda and Dhargandhra, (2) *Marine Salt Works* in Bombay, Kathiawad, Kutch, Madras, Orissa and Travancore, (3) *The Rock Salt* mines in Mandi. India has lost rock salt produced at the mines of Punjab Salt Range and Gotah, each have gone to Pakistan. The only rock salt produced in India is in Mandi State, East Punjab.

It is estimated that per capita consumption of salt in India is about 13 lbs. per annum. The largest consuming provinces are West Bengal, Orissa and Madras.

Ilmenite—One of the most striking features of India's mineral industry is the rapid rise in the production of *ilmenite*. India has now become the world's leading producer of this metal. It is the whitest of all substances and will replace lead more or more in the manufacture of white pigment. The mineral occurs in the "Black Sand" of the beaches near Cape Comorin, the southern-most point of India.

Monazite—is available on the beach sands of Travancore, and Cape Comorin. It is recovered by washing and magnetic separation. In monazite, India leads all other countries of the world. About 88 p.c. of this mineral is supplied from India. Monazite contains small amounts of the heavy element,thorium. Till recently, its main commercial use, now a days a limited one, was for the manufacturing gas mentles. Due however to the large size of thorium necleus (the atomic weight is 232·42 as compared with uranium's 238·5) it is possible to build up fissionable products from it, that is to say, to produce or help in producing an atom bomb.

Zircon—is also available on the beach sands of Travancore and Cape Comorin. Zircon yields zinconia, a high grade refractory and also an alloy material.

Chromite—the oxide of chromium and iron is used for furnace lining and is mined in Mysore and the Singhbhum district of Bihar. Mysore is the principal supplier accounting for nearly 65 p.c. of Indian production.

Magnesite—is valuable to cement, glass, paper, rubber, cosmetics, refractories and aircraft industries and is obtained mainly in Madras and Mysore.

Bauxite—India has vast deposits of good bauxite scattered all over the country. The typical examples are Tungar Hill, only 30 miles from Bombay city. There are also vast quantities in Balaghat, Jabalpore, Mandala, Seoni and Nandgaon districts of the Madhya Pradesh and in Bihar. It is largely used as filtering material in petroleum refineries and for the manufacture of alum and aluminium.

Cement—The ingredients of *cement* are all available in abundance in India. The principal cement producing centres are Porabandar in Kathiawar, Katni in C.P., Lakheri in Rajputana, Jabalpur in M. P., Bihar, Guntur in Madras, etc.

Kyanite—India is the principal producer of *Kyanite*, the most important of the minerals used in the refractory and ceramic industries. The main deposits of kyanite in India occur in Singhbhum, Kharasawan and Seraikela along the northern side of the copper belt.

Copper—ores in India mainly occur in the Singhbhum and Baragunda of Bihar. Here the mine is worked by Indian Copper Corporation.

Limestone—used principally for the manufacture of cement and for constructional purposes and also as a flax in smelting of iron and lead ores, is found in Rhotasgarh in Sahabad district of Bihar, at Katni in M.P.

in Bundi, Jodhpur, Sirohi in Rajasthan, in Rewah and Mahiar State of Madhya Bharat.

Gypsum—is widely developed in Rajasthan, Kathiawar. But the chief producers of gypsum is Bikanir, Johpur and Jaisalmir. Rajasthan raises nearly 80 p.c. of the Indian output. Gypsum is extensively used in cements and plasters, as paints and filters and as 'top-dressing' in agriculture.

Sulphur—There are no known deposits of elemental sulphur in India. Reports of occurrences in Assam and Ladakh (Kashmir) require geological investigation. Assam coal is said to have a high sulphur content. It was reported recently that the Fuel Research Institute at Digwadih has found Rewa coal also rich in sulphur.

Steatite—is also known as soap-stone, pot-stone, talc and in its powdered form as 'fresh chalk' is one of the most variously used industrial minerals. It is available in Rajasthan and Madras.

Precious Stones—Actual diamond mines are in the State of Panna, Central India. *Sapphires* of a very clear blue colour are obtained in Kashmir at an altitude of 14,000 ft. *Garnets* of a rich deep purplish red are found in Barwar District in Kishengarh State and the adjoining tracks of Jaipur State.

Base Metals—India in singularly poor in deposits of *base metals*—tin, lead, zinc and copper. The tin occurs in the mica belt of Bihar and are of no practical importance. There is one area in which copper mining has been conducted—the copper belt of Singhbhum, Bihar.

Lead Ores—are found in Jaipur State and Zawar mines in Udaipur State also in Chota Udaipur State and Hazaribagh.

Miscellaneous Minerals—Of the other minerals useful in industry India is already producing *gypsum* (Kashmir, Madras, Punjab, Rajputana, U.P.); *Steatite* (Guntur in Madras, Bihar, Central India, Madhya Pradesh and Uttar Pradesh, Eastern States, Mysore and Rajputana); *Fuller's earth* (M.P., Punjab and Rajputana); *Barytes* (Madras and Rajputana); *Ochres,* (Central India, Madhya Pradesh, Eastern States, Madras, Orissa, and Rajputana); *Graphite* (Mysore, M.P., Madras, Eastern States); *Tungsten ore* (Jodhpur State); *Asbestos* (Eastern States, Mysore and Rajputana); *Felspar* (Mysore and Rajputana); *Garnet Sand* (Madras); *Bentonite* (Jodhpur); *Aptatite* (Bihar and Madras); *Tantalite* (Monghyr in Bihar) and *Antimony ore* (Chitral State).

MINERAL PRODUCTION OF INDIA

[*Source: Ministry of Works, Mines and Power*]

	Gold (ounces)	*Petroleum* (000 gallons)	*Iron ore* (000 tons)	*Mica* (cwts.)
1940	314,515	81,459	3,166	139,758
1940	389,324	96,869	3,104	150,349
1941	285,930	101,451	3,195	184,534
1942	260,302	97,736	3,217	185,542
1943	252,228	95,719	2,655	159,581
1944	188,206	97,453	2,364	139,392
1945	168,366	82,695	2,264	128,313
1946	131,775	76,752	2,408	130,363
1947	171,704	65,192	2,498	136,308
1948	180,430	65,608	2,285	151,273
1949	163,871	66,711	2,809	151,709

	Copper ore (tons)	*Building materials* (Valu Rs. 000)	*Manganese* (000 tons)	*Ilmanite* (tons)
1939	360,624	1,04,57	844	237,825
1940	401,293	96,13	869	263,152
1941	381,449	1,09,60	785	129,040
1942	363,166	1,45,82	757	49,188
1943	359,789	2,65,70	595	37,789
1944	326,017	2,26,12	371	100,794
1945	329,325	2,36,54	211	172,086
1946	352,718	2,48,70	253	185,023
1947	323,035	3,54,14	451	260,955
1948	322,282	3,16,28	526	229,416
1949	329,304	3,00,31	646	250,023

(*Monthly Abstract of Statistics, June, 1951*)

NATIONAL DEFENCE

Recent History—The partition of armed forces on August 15, involved complete reorganisation of India's armed forces. Notwithstanding all sudden and unexpected interruption, the Army has steadily grown into a powerful machine. Almost completely nationalised, there are at present hardly any non-Indians in the Army holding operational appointments. Recruitment to the Army has been thrown open to all, irrespective of caste or creed, and no class is debarred from joining it. Entry into the army is governed by merit alone.

Highest Command & Direction—With the inauguration of the Republic, the supreme command of all the three Services became vested in the President of the Union. The administrative control is in the hands of the Ministry of Defence and the Armed Forces Headquarters.

There have been very significant changes in the organisation and functions of the Ministry of Defence since the 15th August 1947, when India attained independence. Before September 1946, when the interim government first assumed power, the Commander-in-Chief was not only the head of all the three Services but was also the Defence Minister and occupied a specially privileged position, second only to that of the Governor-General. With the appointment of a popular representative as the Defence Minister, the Commander-in-Chief still continued to be the head of all the three Services. After 15th August 1947, there was a further fundamental change. From that date, each Service was placed under its own Commander-in-Chief, their designations being. *Chief of the Army Staff and Commander-in-Chief, Indian Army; Chief of the Naval Staff and Commander-in-Chief, Indian Navy; and Chief of the Air Staff and Commander-in-Chief, Indian Air Force.* They are Commanders-in-Chief in respect of the forces under their command and Chiefs of Staff of their respective Services in their responsibility to advise and carry out the policies of Government with regard to the country's defence and all other matters relating to the armed forces. The Ministry of Defence is responsible for obtaining policy decisions of Government, for transmitting those decisions to the three Service Headquarters and for their implementation. Also it is more directly responsible for certain matters affecting all the three Services jointly, such as the Armed Forces Medical Services, Ordnance Factories, etc., as well as those which are closely connected with civil authorities, such as Military Lands and Cantonment Organisations, Welfare funds, etc.

Army Headquarters and Commands—The Army Headquarters functions directly under the Chief of the Army Staff and the Commander-in-Chief, Indian Army. It is divided into the following main branches which are again further sub-divided into directorates—(1) General Staff Branch, (2) Adjutant-General's Branch, (3) Quarter-master-General's Branch, (4) Master-General of Ordnance Branch, (5) Engineer-in-Chief's Branch, (6) Military Secretary's Branch.

Under the Army Headquarters, the Army is organised into Commands; each command under a General Officer Commanding-in-Chief of the rank of Lt.-General. The Commands are divided into areas, each under the command of a G.O.C. of the rank of Major-General and the areas in their turn are sub-divided into sub-areas under the command of a Brigadier. These are static formations.

India is now divided into three Commands—the *Eastern Command, Southern Command* and *Western Command.*

Reorganisation Programmes—The Defence Ministry of the Government of India has taken in hand an ambitious development and reorganisation programmes, the most important items of which are as follows:—

1. *Organisation of a new command.*
2. *Establishment of a National Academy* to train the future officers of the three services; The Academy is being constructed at Kharakwasla, near Poona at an estimated cost of Rs. 5·87 crores. The annual intake of cadets will provisionally be 500 and the course of training for entry into permanent cadre of commissioned ranks in the three services will extend over four years. With the establishment of the Academy at Kharakwasla, India will have a unique inter-service institution for training officers of all three services.
3. *Formation of new training establishments* in place of those lost by partition and also to meet the growing needs of India, *e.g.*, Staff College, School of Military Engineering, Naval Training establishments;
4. *Development of Ordnance Factories;*
5. *Military Science*—In order to meet country's defence requirements, a *Defence Science Organisation* has been created and a *Scientific Adviser* appointed to the Defence Ministry. In this connection, the Government has set up a Policy Board and an Advisory Committee. The former is concerned with the wider aspects of defence science and policy, integration of military and scientific thought and planning of defence research as a whole. The functions of the latter are to consider the technical and scientific aspects of Service requirements, to keep in close contact with research in relation to defence science in the Service laboratories, universities and other institutions and to keep in touch with scientific and industrial advancement in the country generally.

Defence Science Laboratory has been started in the building of the National Physical Laboratory at Delhi. A *Psychological Research Organisation* has been created in the three services as a part of Defence Science Organisation.

6. *Organisation of liaison and procurement office* in the U.K. under the High Commissioner of India for all the three services:—A strong organisation in the U.K. to look after the procurement of defence stores and equipment from abroad, known as *Armed Forces Liaison and Procurement Organisation* has been created in the High Commissioner of India's Office in U.K. The liaison organisation has three cells, one for each service which always keep in touch with Service Ministries of England.

7. *Modernization and strengthening of India's naval fleet* by acquisition of new vessels:—First significant step towards modernization of Indian Navy is the acquisition of a 7,000 ton cruiser of the Leander class. *Delhi* modernised with the latest weapons and equipment like radar. Three destroyers have been acquired from the U.K. namely *Rajput, Ranjit* and *Rana.*

8. *Strengthening of India's Air Force.*

9. *National Cadet Corps*—In order to build up a reserve force to be called into service in a national emergency, schemes have been taken in hand of raise a *Territorial Army* and a *National Cadet Corps.*

National Cadet Corps—On April 8, 1948, the Indian Parliament passed the *Indian National Cadet Corps Act* with the object of (*a*) developing character, comradeship, idea of service and leadership in the youth, (*b*) giving the youth of the country basic military training and training in the weapons and equipment of three Services and thus attracting suitable young men to join country's armed forces, (*c*) stimulating interest in the defence of the country and (*d*) building up a reserve of leaders to enable the armed forces to be expanded rapidly in a national emergency. The corps has been raised from all States in India except Hyderabad and Jammu and Kashmir. It has two Divisions—Senior and Junior. The former is intended for colleges and universities and the latter for schools. The strength of the Senior Division is 736 officers and 22,938 cadets. As a third division, a girls' division has also been formed.

The N.C.C. is entirely voluntary, with no liability for services in the Armed Forces. There is no direct financial inducement to those joining the Corps.

10. *Indian Territorial Army*—On September 1, 1948 was passed the *Indian Territorial Army Act* primarily (*a*) to build up a reserve force to be called into service in a national emergency (*b*) to be a second line of defence to reinforce the regular army as and when the occasion demands (*c*) to guard the homefront, help keep the supply and communication lines open, man the coastal defence and assist the civil administration in preserving internal order. The territorial army will be maintained on zonal basis in 8 zones and will comprise technical and administrative units pertaining to all arms and services of the Regular Army to form a balanced force by itself. Every individual joining the Territorial Army will be required to undergo a period of intensive training for a month or two every year and a certain number of parades each month. The age limit in the Force will vary from 18 to 35.

11. *Intigration of Indian States Forces*—On the 1st April, 1950 Armed Forces of India were completely unified. The Government of India assumed complete financial responsibility for and overall control of the former Indian State Forces. The Indian State Forces are now being reorganised and when this process is completed, they will, in all respects, including pay and allowances, organisation etc., be on par with

Indian Army units. In the case of the State Forces of Travancore-Cochin, Mysore and Hyderabad, complete control, administrative as well as operational, has been assumed by the Indian Army and Indian Army officers have been appointed commandants of these forces. As soon as the reorganisation of these Forces are over, they will be completely integrated with the Indian Army.

INDIAN ARMY

Set up of the Indian Army—The Indian Army consists of Regular Army and certain other forces which act with Regular Army on certain occasions. These forces are the Reserve Forces and the Territorial Army. They act as second line of defence. The Regular Army consists of officers, junior commissioned officers, warrant officers and non-commissioned officers and other enrolled persons who are liable to render continuously for a term military service to the Union of India in every part of the world or in any specified part of it.

There are two classes of Reserve Forces, naming the *Indian Reserve Forces* and the *Indian Supplementary Reserve Forces.*

These forces should be distinguished from the *National Cadet Corps* which the Central Government is authorised by an Act of 1948 to raise and maintain.

Some States have been empowered to raise *Home Guards.* Such as Madras Home Guards recruited under Madras Home Guards Act 1948 and *National Volunteer Force* of West Bengal.

In the Regular Army, the term "officer" is applied to a commissioned officer and does not include a junior commissioned officer. The commissions for both these classes of people are granted by the President of India. Next in order after officers and junior commissioned officers are warrant officers who are also appointed by the President. Below the warrant officers are the non-commissioned officers and the last to come in the series are the enrolled soldiers. All these persons are subject to the Indian Army Act.

At the head of the Army is the commander-in-chief; The Navy and Air Force have their own commanders-in-chief—all appointed by the Government of India and are under its control.

Excepting for officers, junior commissioned officers and warrant officers, the entrance to the Regular Army is by enrolment. The service of every member of the Army, whether as officer or otherwise is liable to be terminated at the pleasure of the President. So a member of the Army may be dismissed, discharged, retired, removed or released. In any of the above cases he has no right to complain of wrongful dismissal or ask for compensation for it in a court of law.

Army Training—As the installation of the National Academy will take some years to complete, Government started, with the effect from January, 1949, an experimental *Defence Academy at Dehra Dun* with a Military Wings and Joint Services Wing where courses are at present being conducted to train youngmen for commissions in the three services. Indian officers have been attending institutions for military education in the U.K. and U.S.A., where they are trained as staff officers and given advanced instruction in technical subjects. The *Staff College* has been recreated at Wellington.

Important Wings in the Indian Army—The important services in the Indian Army are—*Armoured Corps, Artilery, Engineers, Signals and Infantry.* For the supply of munitions of war to the Army there is *Indian Ordnance Corps* and for the organisation of the Commissariat there are *Indian Army Service Corps* and *Indian Electrical* and *Mechanical Engineers.*

1. Indian Armoured Corps is organized into two types of units—(*a*) *Tank Units* and (*b*) *Armoured Car Units.*

2. Indian Artillery has following categories—(*a*) *Field, Heavy and Mountain Regiments,* (*b*) *Heavy Anti-Aircraft Regiments,* (*c*) *Light Anti-Aircraft Regiments,* . (*d*) *Anti-Tank Regiments,* (*e*) *Anti-Aircraft and Anti-Tank Regiments,* (*f*) *Coast Regiments and* (*g*) *Survey Regiments.*

3. Indian Engineers fall into three categories—(*a*) *Field Units,* (*b*) *Lines of Communication Units* and (*c*) *Specialized Companies.*

4. Indian Signals Service comprise wireless telephony and telegraphy, line telephony and telegraphy, visual telegraphy, message carriers and a pigeon service.

5. Indian Infantry—main types of infantry units are—(*a*) *Infantry Battalions,* (*b*) *Machine-gun Battalions.* Separate Motor Battalions which form an essential part of armoured brigades are also attached to the Infantry.

6. Indian Army Ordnance Corps—may be broadly described as the agency whose duty it is to supply the army with munitions of war at and also clothing and general stores other than engineering stores. The different varieties of stores are—(1) Vehicles and their maintenance stores, (2) Engineering Stores, (3) Field Artillery Stores, (4) A. A. Artillery Stores, (5) Small arms and machine guns, (6) Ammunitions, (7) Scientific Stores and (8) General Stores and Clothing.

The Ordnance Units also include Mobile Laundries, Bath Units, Mobile Cinemas, Mobile Ammunition, Inspection and Repair Units and Ordance Beach Detachments.

7. India Army Service Crops consists (*a*) *Supply,* (*b*) *Transport,* (*c*) *Petrol.*

8. Indian Electrical and Mechanical Engineers for inspection and maintenance of wheeled vehicles, tank, artillery, small arms, wireless radio location, fire control and all other instruments, repairs of all equippments, and investigation defects of design and recommendation for improvement.

9. Other branches in the Army include—(a) *Army Educational Corps,* (b) *Intelligence Corps* for obtaining information from every possible source, (c) *Military Medical Services,* (d) *Indian Army Veterinary Corps,* (e) *Corps of Military Police,* (f) *Movement Directorate* which is responsible for the direction of military movements in war and for the co-ordination of military movements among various carrying agencies and services, (g) *Military Farms Department* for the management of military farms, (h) *Indian Canteen Corps,* (i) *Indian Pioneer Corps* consisting of unskilled labourers for work in air fields, building camps, road making etc., (j) *Military Accounts Department* deals with pay and accounts of the Indian Army.

INDIAN NAVY

Its History—The Indian Navy traces its history from the formation in 1613 of the Honourable East India Company's Marine. Known in the early days of this century as the Royal Indian Marine, the Service was reorganised in the late 1920's on a combatant basis. The Indian Navy was given independent status and official constituted in September, 1934.

Indian Navy Expansion—The Indian Navy, though still a small force is expanding rapidly. In four years of its independent existence, it has made good all-round progress. Before August 1947, the Navy consisting of four minor vessels was an adjunct to the Royal Navy. Partition further reduced this naval force leaving only four sloops, two frigates, one corvette, one survey vessel and some auxiliary vessels and deprived it of three of its most important and well-developed shore establishments.

Within the four months of the country's attaining independence, the 7,030-ton Leander class cruiser H.M.S. Achillis (renamed "Delhi") was acquired from Great Britain and is now the flagship of I. N. Squadron. The arrival of the "Delhi" marked the birth of the I. N. Squadron including in it few existing vessels. Then came the purchase in 1949 three 1700 ton destroyers from Britain—H.M.S. Rotherham, Redoubt and Raider which were renamed "Rajput", "Ranjit" and "Rana" respectively. With these were formed India's first Destroyer Flotilla. October 1949 saw the formation of the Frigate Flotilla camprising "Jumna", "Sutlej", "Cauvery" and "Kistna" which had come to India after partition. Another Frigate 'Ter' is now being used as a Boys Training Ship to give practical training to boy ratings. To these, a mine-sweeper flotilla will be shortly added. Also, the fleet of the Navy's Survey vessels has been enlarged to meet the growing survey requirements along the country's coast. The establishment of a *Torpedo Depot* at Bombay has for the first time made Navy self-sufficient in the matter of servicing and repairs.

A new post designated the "Admiral Afloat" in charge of all ships of the Navy at sea was created.

The Indian Naval Squadron to-day thus consists of a cruiser, a Destroyer Flotilla and a Frigade Flotilla consisting of the frigates Jumna, Kistna, Cauvery, Sutlej and Tir. There is also another frigate Kukri and a corvette Assam. The twelve fleet minesweepers are Rohilkund, Rajputana, Orissa, Madras, Konkan, Kumaon, Deccan, Carnatic, Bombay, Bihar, Bengal and Khyber. There are also four trawlers, Amritsar, Barg, Calcutta, and Nasik. Apart from these there are two motor minesweepers.

It is the aim of the Defence Department to build up a carrier Task Force with front line carrier air groups with a strength of 54 aircraft as a striking force. This would form the nucleus of the Fleet Air Arm for the Indian Navy. The Task Force would serve a three-fold purpose, namely protecting merchant navy convoys, helping the army in amphibious operation, and in attacking enemy posts.

Fleet Air Arm—To organise the fleet air arm for the Navy the Government of India obtained the services of an expert from the British Navy early in 1949. The first aircraft carrier according to the plan should arrive in 1955 and the second one in 1957 and there will be a total number of 300 aircraft. The first batch of pilots to fly these aircraft are now undergoing advanced training in the United Kingdom after finishing their Basic Flying course at Jodhpur. Hereafter it is the intention of the navy to train these pilots in the Naval Aviation School at Cochin.

Naval Training—At home, the principal training establishment India got on partition—.I.N.S. "Shivaji", the Mechanical Training Establishment at Lonavla near Bombay, and I.N.S. "Valsura", the Electrical School at Jamnagar, were expanded. In 1948 two new training centres were opened—

I.N.S. "Venduruthy" at Cochin and I.N.S. "Circars", the Boy's Training Establishment at Vizagapatam.

To the Cochin centre, rightly described as "the cradle of the Indian Navy", goes the credit for having trained a large number of Direct Entry officers and men to fill in the gaps in naval personnel. Today it is the largest I.N. training centre, with courses in Seamanship, Gunnery, Signals, Torpedo and Anti-Submarine, Supply, Secretariat and Cookery.

Meanwhile, the Indian Military Academy at Dehra Dun (now known as the National Defence Academy) was re-organised in January 1949, so as to provide the initial training to future regular officers of the Navy. They are later sent to the United Kingdom for a further period extending over 4 to 6 years. It is, however, planned to carry out their entire training in India as soon as facilities are sufficiently developed.

Two Historical Events —Two historical events in 1950 marked the growth of the Navy. The first came on January 26, 1950, consequent upon Indian becoming a Republic, when Navy shed its title of "Royal" which had been associated with its name for decades. On that day the white ensign yielded place to Indian Naval Ensign in all ships and establishments. Second notable event occured on May 27, 1951 when Dr. Rajendra Prasad presented the President's colours which had been laid up when India became a Republic.

INDIAN AIR FORCE

Birth & Progress —The 'germ idea' for India having her own Air Force originated with the recommendation of the Skeen Committee in 1926.

On the outbreak of World War II rapid development of the Indian Air Force were swiftly carried out, and by 1940 Coastal Defence Flights had been organised at Bombay, Calcutta, Madras, Cochin and Karachi. Manned by the Volunteer Reserve of Officers, mostly Indians, these Flights were entrusted with the task of defending the 8,000 mile long Indian coastline.

The Present Set-up —From August 15, 1947 Indian Air Force has become independent service under Defence Ministry and is no longer under the Commander-in-Chief of India as in British days. Indian Air Force is now under the Command of the Chief of Air Staff and C-in-C, I.A.F.

Air Force Branches –Officers of the Indian Air Force are divided into following branches—(1) *General Duties (Flying)*—It is composed of Air crews, that is to say pilots, navigators and wireless operators or Air gunners. (2) *Technical*—This branch consists of four sections *i.e.* Engineering, Signals, Armaments and Electrical Engineering. (3) *Equipment*—This branch deals with all stores, except stationery and fuel (4) *Administrative and Special Duties Branch*—The branch includes following sections—Administrative, Codes and Cipher, Catering, Intelligence, Link Trainer, Motor Transport, Photo and Miscellaneous. (5) *Meteorological*—This is a specialised branch dealing with the preparation and distribution of information regarding flying conditions. (6) *Education Branch*—organises and conducts general and technical education for all ranks and cadets under training. (7) *Legal.*

I. A. F. Training —*The Advanced Flying School at Ambala* and the *Elementary Flying School at Jodhpur* are known as No. 1 and No. 2 Air Force Academies imparting complete training to pupil pilots. The *Initial Training Wing at Coimbatore* has been organised and is known as No. 3 Air Force Academy and trains officers for ground duty. A *Radar School* has been started. A *Technical Training College* has been opened in 1949 at Jalahalli, near Bangalore combining the courses of air force, engineering for officers and apprentices. There is also a *Air Navigators' Training School at Jodhpur* to overcome the present shortage of navigators in I.A.F. A *Flying Instructors' School* and a *Paratroopers' School* are other links in the chain of I.A.F. training establishments. *The Base Repair Depot at Kanpur* is for the overhaul and major repairs of aircraft. Foundation stone has been laid in 1950 of the first permanent I.A.F. Station at Agra.

OFFICERS' RECRUITMENT AND TRAINING

Recruitment to the officer cadre of the three services of the Armed Forces is open to all Indian Nationals regardless of caste, community and creed. It is based now on competitive merit and physical fitness.

Armed Forces Academy, Dehra Dun (Inter-Services Wing) —pending the starting of National Academy at Kharakwasla, near Poona, an Inter-Services Wing has been started at the Indian Military Academy, Dehra Dun which is known as Armed Forces Academy. There are two Wings at this Academy—one, Inter-Services Wing for training of Officer Cadets for all the three services and other, the Military Wing to which cadets for the Indian Army only are admitted.

There are two entries each year to the Inter-Services Wing; one in January and the other in July. Duration of the course is two years, after which Army Cadets go to the military wing of the Armed Forces Academy, while Naval and Air Force Cadets go to the training establishments of their respective Service for specialized training.

Indian Army —There are at present three different systems of recruitment in the Army, in addition to the recruitmnt though Inter-Services Wing above-mentioned:—

(*a*) The recruitment of *cadets for the Military Wing and for the special courses for technical graduates* of the Armed Forces Academy Dehra Dun. These cadets are granted permanent Commission after successful completiton of their course of training.

(*b*) Grant of Short Service Commission for three to five years in technical branches only—Short Service Commissions for a period of three years extendable at the discretion of the government are granted to civilians with engineering qualifications. The age limit is from 20 to 45 years on the date of application.

(*c*) Temporary Commission—In order to meet overall shortage of officers in the Indian Army, it has been decided to grant Temporary Commission for one year (extendable at the discretion of the government) to suitable candidates of age between 20 and 45 years).

Indian Navy—There are two distinct methods of recruitment to the commissioned ranks of the Indian Navy in addition to the recruitment through the Inter-Services Wing of the Armed Forces Academy. One is through entry as cadets and the other is direct entry in Commissioned Ranks. Cadets enter the permanent cadre of the Service. Direct entrants in commissioned ranks are initially engaged on short service commissions of 5 years' duration except in the case of the Instructor's Branch where permanent commissions are granted.

Cadets Entry—The recruitment of Cadets are made to (*a*) Executive, (*b*) Engineering, (*c*) Electrical and (*d*) Supply and Secretariat branches:

Candidates should be between the 17½ and 19½ years of age and should have passed Matric or any other recognized equivalent examination. They will be selected through Public Service Commission and Services Selection Board. After completion of the preliminary training in India, cadets are sent to United Kingdom to complete their training.

Direct Recruitment in Commissioned Ranks—The branches to which direct recruitment in commissioned ranks is at present made are (1) Executive, (2) Engineering, (3) Electrical, (4) Supply and Secretariat and (5) Instructor.

Indian Air Force—Recruitment to the I. A. F. general duties (flying) branch is open to candidates between the ages of 17½ and 21 years, possessing good eye sight (6·6) and having a high standard of physical fitness. The minimum educational qualification is Matric or its equivalent. The training covers a period of two years given at three successive schools, *viz.* Initial Training Wing at Coimbatore, Elementary Flying Training School, Jodhpur and the Advanced Flying traing School at Ambala. At the conclusion of their training cadets are commissioned in the I.A.F. general duties branch as pilots in the rank of Acting Pilot Officers and are presented with their flying badges.

MISCELLANEOUS

Free India's New Gallantry Awards—The details of new military awards are as follows:—

"Param Vir Chakra"—the highest decoration for gallantry, will rank next only to the Victoria Cross and will be awarded for the highest form of bravery in the presence of the enemy. It will be a replica of Asoka's wheel 1½ inches long, and when worn alone will carry in the centre a miniature replica of the medal.

Mahavir Chakra and *Vir Chakra,* the second and the third awards for Military Cross. They are awarded for service in the presence of the enemy, and rank next to the Distinguished Service Order.

Fourth award is the *"Mention in Despatches"* for acts of gallantry of distinguished service in operations against the enemy or under conditions equivalnt to service against enemy which are not of such high order as to merit the award of *Vir Chakra* but still deserving recognition.

Monetary benefits attaching to the three awards, for which commissioned officers will not be eligible, will be Rs. 50, Rs. 30 and Rs. 20 per month, respectively. Higher allowances will be admissible to junior commissioned officers who have won certain previous awards.

Armed Forces Badges—Asoka's three lions has now replaced the Crown in Army badges of rank and its miniature replica is used as a distinction.

Disappearance of Word "Royal" and Indian Naval Ensign ——From 26th Jan. 1950 the Navy dropped the "Royal" from its title. The British white Ensign was replaced by the new Indian Naval Ensign with Tricolour in the place of Union Jack. Similarly the expression "His Majesty's Ship" before the names of vessels of the Navy has been dropped and the words "Indian Naval Ship" substituted.

Military Educational Institutions—Following are the main educational institutions which are directly or indirectly connected with the military education of the country—(1) *Lawrence Schools* at Simla, Nilgiri Hills, and Mount Abu for the benefit of the children of the soldiers to a limited extent. (2) *King George's R. I. Military Colleges* at Jullundur, Ajmer, Belgaum and Bangalore for providing education to the sons of Indian soldiers. (3) *School of Foreign Languages at New Delhi,* started in 1949 to impart certain foreign languages to officers of the Armed Forces (4) *School of Military Engineering* started in 1943. (5) *Armed Forces Medical College, Poona.* (6) *Staff College,* newly started at Wellington in Nilgiri Hills. (7) *Air Technical College* to be started.

CINEMA IN INDIA

History of the Film Industry—Since the day Dada Saheb Phalke produced the first Indian film *Harish Chandra* in the year 1912, the cinema industry has been making steady progress. The movie gave place to the talkie in the year 1931 when the first Indian talking picture *Alam Ara* was presented to the screen by the Imperial Film Co., Bombay. To-day India now produces 250 to 280 pictures a year. India stands today second only to Hollywood in film production but it must be admitted that this huge production is not correlated to a high level of creative excellence. Indian film industry consumes about 200,000,000 feet of raw film every year and employs about 70,000 people in this industry. Besides, it has produced a good field for several auxiliary business like publicity, make-up etc. Cinema industry occupies eighth place among the industries of India. But expansion of industry is handicapped by the lack of theatres. We have only 3,200 cinemas in our country as compared to 17,000 in America and 5,100 in England. In other words, there are only six cinemas for a million population as compared to 125 in U.S.A. and 120 in U.K. Yet India is only second to U.S.A. in producing pictures, Britain being a 'poor third'. In our country production has gone up by over 100 p.c. in the post-war period, while there has been only over 10 p.c. increase in the number of cinemas.

The early development of the industry took place in Bombay, which to-day is Hollywood of India. Next in importance to Bombay is Madras with an annual production of more than 50 pictures, Calcutta's output is about 40, mostly in the Bengali language.

Film Enquiry Report—The Report of the Film Enquiry Committee which was constituted by the Government in 1949, was issued on October, 1951.

The Report stated that the industry is not in a position to undertake reform on its own, evils having crept far too deep into the system and defects being far too widespread.

The technical elements in the films have improved in standards, but where intellect and art are involved, the films to-day exhibit poverty as the themes are stereotyped and plots monotonously uniform in pattern.

The following is the recommendations of the Committee—(1) the creation of an autonomous statutory *Film Council of India.*

The proposed Film Council of India will act as the industry's 'friend, philosopher and guide' and will provide the necessary inspiration to conduct its affairs on healthy and constructive lines. The Council would set up Panels to deal with different activities of the industry as well as research, the manufacture and supply of raw materials. The statutory nature of the Council will enable it to intervene effectively in disputes between different branches of the industry; in regard to standards of production, however, the Council should function through the Production Code Administration.

The Film Council is to be an eighteen-member body, including producers, directors, exhibitors, artistes and technicians, Central and State Government nominees and a labour representative. The Chairman, to be nominated by the Central Government, should be a person of high judicial status.

Funds for the Council will be raised mainly through a cess on raw cinema film imported into or manufactured in this country, exposed cinematographic film from abroad and 10 per cent of the net income derived from the levy of entertainment tax on the exhibition of films. The proceeds of the cess will be utilised in research and training institutions for the industry.

The Council will run institutes for training of film artistes and technicians. To give a fillip to improved production standards, the Council will award annual prizes for the best story, best direction, best review and the best film.

An Educational Panel of the Council will be charged with the task of encouraging production of educational and children's films.

(2) *Production Code.*—As an adjunct to the Film Council, the Committee recommends the setting up of a Production Code Administration. Its Panel of Experts will scruitinise every script and exercise some control over the production. In particular, the PCA will have to approve the films for export and will have branches at Delhi, Madras, Calcutta and Bombay and will be run by the Government, in the initial stages.

(3) *Film Finance Corporation*—The Film Finance Corporation proposed by the Committee will have an initial capital of Rs. 10 million subscribed by the State, industry and public. It may borrow an equal sum, with the approval of the Reserve Bank. "If the film industry is to be rehabilitated, the Committee sees no escape for regulated finance being made available to film producers through the Film Finance Organisation."

(4) *Taxation Relief*—The adoption of a uniform entertainment tax tariff at 20 per cent of the gross takings has been stressed as a dire need by the Committee, with a view to aiding the industry. It has also proposed a review of other miscellaneous fees, like licence fees for operation of cinemas and storage of films.

The Committee has recommended placing on O.G.L. raw film imports up to 240 million feet per annum. The distribution will be done through film associations.

Provision has been made for import also of studio equipment up to Rs. 45,00,000 a year and projection apparatus for replacement and expansion.

(5) *Foreign Markets*—The Committee believes that in addition to expanding present overseas markets for Indian films, it might be possible for them to get into the English-speaking regions. An export corporation has been envisaged to look after this aspect.

No unprocessed film is to be allowed to be sent abroad without approval of the Production Code Administration.

(6) *Short Films*—In the absence of any regular prospects of the industry producing and exhibiting 'approved films' voluntarily, the Committee feels that the present system of production and distribution of shorts and news-reels by Government should be continued in view of their proved usefulness.

Government of India's Control—Department of Information and Broadcasting which was for many years a part of the Department of Home Affairs in the Government of India, has been separated in 1949 under the control of a separate Minister of State. This department is now known Ministry of Information and Broadcasting and controls everything concerning films in India including Films Division of the Central Government.

Film Advisory Board—Government of India have constituted in 1949 a Film Advisory Board to advise the Film Division of the Ministry of Information and Broadcasting. The Board will prereview all documentaries and news reels produced by the Film Division and advise Government on such matters as may be referred to it.

Films Division—Initially started in 1942 under the name of Information Films of India for keeping the war effort, the organisation ceased to operate in 1946. It was revived in 1948 by the our National Government. The Film Division which is a branch of the Ministry of Information and Broadcasting has its head quarters at Malabar Hill, Bombay. There are two distinct departments of the Films Division one is the documentary section, known as the *Documentary Films of India* and the other is the *Indian News Review.* The Indian News Review produces one newsreel of about 1,000 ft. every week. The Documentary Section is concerned with the production of short films of instructional, cultural and educational value.

The organisation consists of the following five units—Documentary Section, Newsreel Section, Distribution Section, Public Relations Section and Administrative Section. The Films are produced in five languages—English, Hindustani, Tamils, Telegu and Bengali and are released simultaneously all over India. The exhibition of these films is made compulsory under a condition in the exhibitors' license and rental is charged approximately on the basis of 1 p.c. of the collections of cinemas.

There is an arrangement of exchange of newsreel items with foreign newsreel companies. In this way important events in India are publicized in foreign countries and the Indian newsreel covers news from other countries.

The Film Division upto the middle of 1951 produced over eighty-nine documentaries and 148 Newsreels in five languages.

Censorship of Films—Government of India have taken over the film censorship which was states' subject from 15th Jan. 1951 and constituted a Central Board of Film Censors which is charged with the responsibility of formulating and enforcing an all-India policy for censoring of motion pictures produced or imported in the country. Besides Chairman, the Board consists of six honorary members. A representative of the film industry is also appointed by the Government.

The new department consists of a Central Board with its headquarters at Bombay and two regional officers in Calcutta and Madras. Each picture presented for censorship is examined by a committee, consisting of the Regional Officer and two advisers of the panel. If the picture is unanimously passed by this committee, a certificate is issued forthwith. If the decision of the examining committee is not unanimous, or if the producer is not satisfied with its decision, the picture will be examined by the regional advisory panel. If the decision of this body is unanimous and acceptable to the producer, a certificate will be issued. However, if the decision of the revision committee is not approved by the producer the picture will be examined by the Central Board and a decision given. The producer may appeal against this decision also to the Government of India.

Taxation—The industry is now under the following taxations:—(1) Import duty of raw films and production and projection machinery, (2) Terminal or Octroi tax by most district municipalities, (3) Government electricity duty. (4) Entertainment tax, (5) Income tax, supertax and excess profits tax, (6) Advertisement tax on cinema publicity on screen levied by many municipalities.. In case of some State governments entertainment tax have been increased 50 per cent. in M. P. Berar, by 25 and to 75 p.c. in Bengal.

Some World Film Statistics—The United States leads the world with the greatest production of feature films. U.S.A. produces about 430 feature films a year, followed by India with 250, Japan 123, France 106, Mexico 84 and Britain 71. But United States ranks only fifth in the number of cinema seats per one thousand head of population—Monaco 190, Australia 182, New Zealand 149, Britain 84, U.S.A. 83. 'India has a ratio of four seats to one thousand people and China, Indo-China and Ethiopia one for each one thousand (from *"World Communications"* compiled by U.N.E.S.C.O. in 1950).

Some Indian Film Statistics—There are nearly 2,400 cinemas in the country situated in permanent or semi-permanent buildings and about 850 located in tents and other similar structures. The average seating capacity of a permanent theatre in India is about 600, ranging usually between 400 and 1,200. The seating capacity of touring cinemas may also be taken at about the same average. This gives a total capacity of about 20 lakhs. The 2,400 permanent theatres represent a capital investment of Rs. 24 crores. Total cost of 850 touring cinemas may be estimated at an additional 2 crores of rupees. The over-all capital investment in the exhibition side of the industry would thus amount to nearly 26 crores of rupees. The annual production of film in the country is about 275. There are sixty studios in the country with their equipment cost about 4 crores of rupees and the investment on the 38 processing laboratories and the stocks of equipment and stores may be estimated at an additional Rs. 2 crores, making a total investment of 6 crores of rupees on capital equipment and stores. The net revenue to the industry may be estimated at not less than Rs. 20 crores. To sum up, the industry collects an annual attendance of 60 crores of people, representing capital investment of 32 crores in fixed assets and 9 crores in working capital and earns a revenue of 20 crores of rupees.

COUNTRIES OF ORIGIN OF FEATURE FILMS

The following table gives the country of origin of feature films exhibited and produced in India for the year 1937 to 1949:—

Year	*Foreign*	*Indian*
1937 ..	.. 395	179
1938 ..	.. 277	172
1939 ..	.. 224	165
1940 ..	.. 201	171
1941 ..	.. 169	170
1942 ..	.. 197	163
1943 ..	.. 212	159
1944 ..	.. 298	120
1945 ..	.. 332	99
1945 ..	.. 332	98
1946 ..	.. 364	200
1947 ..	.. 313	283
1948 ..	.. 291	264
1949 ..	.. 289	143*

FILMS IN DIFFERENT INDIAN LANGUAGES

	1946	1947	1948	1949*
Hindi ..	155	186	147	82
Marathi ..	2	6	7	5
Gujrathi ..	1	11	28	8
Bengali ..	15	33	37	31
Tamil ..	16	29	32	9
Telegu ..	10	6	7	2
Others ..	1	12	6	6
Total ..	200	283	264	143

* Upto the end of June, 1949.

PERMANENT AND TOURING CINEMAS IN INDIA 1951*

	Stations	No. of Cinemas
Bombay Circuit		
Permanent	281	595
Touring	..	50
Central Circuit		
Permanent	241	436
Touring	..	30
North Circuit		
Permanent	..	331
Touring	140	20
Bengal Circuit		
Permanent	217	425
Touring	..	25
South Circuit		
Permanent	434	811
Touring	..	475
Total, Permanent	1313	2598
Total, Touring	..	600
Grand Total	..	3198

* *Bombay Circuit*—Bombay, Saurashtra and Kutch.

Central Circuit—Khandesh, M.P., Madhya Bharat, Rajasthan, Ajmer, Bhopal, Vindya Pradesh.

North Circuit—Delhi, U.P., Punjab, Pepsu, Himachal Pradesh, Kashmir.

Bengal Circuiut—West Bengal, Bihar, Assam, Orissa, Chandernagore, Tripura, Manipur, Andamans.

South Circuit—Madras, Travancore, Cochin, Hyderabad.

IMPORTS OF CINEMATOGRAPH FILMS AND EQUIPMENT

(*Figures in Lakhs*)

	RAW FILMS			EXPOSED FILMS				
	Footage.	*Value.* (Rs.)	*Import duty.* (Rs.)	*Footage.*	*Value.* Rs.	*Import duty* (Rs.)	*Sound-recording equipment and accessories* (Rs.)	*Projection equipments and accessories* (Rs.)
1945-46	808·94	29·11	9·71	161·88	45·28	15·12	15·37	19·10
1946-47	1286·23	54·11	18·83	151·15	24·60	22·62	23·17	46·70
1947-48	1742·00	79·96	25·09	150·88	16·98	29·01	84·64	61·51
1948-49	1564·16	76·96	24·63	123·91	31·52	20·00	24·53	37·14
1949-50	1787·50	95·30	28·97	146·23	38·18	18·25	11·50	61·08
1950-51	2085·38	125·59	32·47	145·37	35·79	18·63	9·53	61·94

Source: Government of India's Accounts relating to Seabourne Trade of India.

LANDMARKS & FACTS OF CINEMA IN INDIA

1896 First exhibition of cinema in India by Lumiere Brothers.

1907 First cinema house was opened in Calcutta by late J. F. Madan.

1913 D. Phalke of Bombay is the first Indian to produce first Indian film, a mythological play *Harischandra* measuring 3,700 ft. which was released at Coronation Cinema, Bombay April, 1913.

1917 First Indian film produced in Bengal is *Nala Damayanti* by Madan Theatres.

1918 Indian Cinematograph Act passed for licencing exhibition of film.

1927 Government of India appoints a Cinematograph Enquiry Committee.

1931 *Alam Ara* is the first Indian talkie by Imperial Film Studio, Bombay released on 14th March, 1931. The second talkie was *Shirin Farhad* by Madan Theatre, Ltd., Calcutta.

1931 Prabhat Studio's *Sairendhri* is the first Indian colour film though it was coloured in Germany. First cine-colour picture done in India is was Imperial's *Krishan Kanya*.

Karma is the first Indian-English film (talkie) by the late Himansu Rai, the founder of Bombay Talkies but produced mainly in England under European supervision.

1939 Silver Jubilee of the Film Industry in India celebrated by holding a Congress and Exhibition in Bombay.

1940 *Court Dancer* is the first full length sound Indian English film made in this country under purely Indian supervision.

1943 Information Films of India set up by the Government of India.

1949 Appointment of the Film Enquiry Committee by the Government of India.

1949 Restriction on length of films to be exhibited to 11,000 ft. (feature film) and 400 ft. (trailors).

LEADING INDIAN PRODUCERS

Bombay—

Rajkamal Kalamandir.
Bombay Talkies.
Kardar Productions.
Sri Ranjit Movietone.
Filmistan.
Filmarts.
Bombay Cinetone.
Famous Pictures.
Prakash Pictures.
Mahboob Productions.
R. K. Film.
Nav Ketan.
Jagat Pictures.
Mohan Pictures.
National Film Circuit.
Nigaristan.
Rup Kamal Chitra.
Habib Productions.
Nav Chitrakar.
Talwar Films.
Chetan Chitra.
Goodluck Pictures.
New Premier Films.
Fazli Brothers.
Hira Films.
Minerva Movietone.

Calcutta—

Indra Movietone.
East India Films.
Aurora Film Corpn.
New Theatres Ltd.
Radha Films.
Beng. National Studios.
De Luxe Pictures.
Indian National Art Pictures.
M.P. Productions Ltd.
Rupasree Ltd.
Chitramaya.

Poona—

Prabhat Film Co.
Saraswati Cinetone.
Ranjit Movietone Co.

Madras—

Bharat Movietone.
Jaya Films.
Gemini Studios.

FILM STUDIOS IN INDIA

Bombay

Bombay Talkie Studios.
Famous Cine Laboratory.
Famous Pictures.
Filmistan Studios.
Jupitor Studos.
Kardar Studios.
Prakash Pictures Studios.
Raj Kamal Kalamandir.
Central Studios.
Hindustan Studios.
M. & T. Studios.
Rangmahal Studios.
Starlight Pictures.
Sri Ranjit Studios.
Sri Sound Studios.
Good Luck Pictures.
Supreme Pictures.

Calcutta

Associated Production Ltd.
Aurora Film Corporation.
Bengal National Studios.
Cal. Movietone Studios.
East India Film Co.
Indraloke Studios.
Kali Films.
National Sound Studios.
New Theatre Ltd.
Radha Films Studios.
Rupasree Ltd.

DISTRIBUTORS

Bombay

India Film Exchange.
Eastern Film Exchange.
Kapurchand Ltd.
Western India Theatres Ltd.
Shivsarandass Kidernath.
Novelty Pictures.
Model Pictures.
Saroj Pictures.

Calcutta

Associated Distributors Ltd.
Aurora Film Corporation Ltd.
De Luxe Film Distributors.
Dossani Film Corporation.
Empire Talkie Distributors.
Golden Film Distributors.
Moviestan Ltd.
Rajashri Picture Ltd.
Prima Films (1938) Ltd.

LEADING FOREIGN PRODUCERS

Universal (U.S.A.)
Metro-Goldwyn-Meyer (U.S.A.)
R.K.O. Radio Pictures (U.S.A.)
Warner Bros. (U.S.A.)
20th Century Fox (U.S.A.)
Columbia (U.S.A.)
United Artists (U.S.A.)
Gainsborough Pictures (English).
Two Cities Films (English)
London Film Productions (English)
British International Pictures (English)
Arthur Rank Productions (English)
Ealing Studios (English).

ACADEMY AWARDS FOR PRODUCTION

The Academy of Motion Picture Arts and Sciences (America) confers awards of merit annually to recognise outstanding achievements in motion pictures.

Production

1928—Wings (*Paramount*)
1929—Broadway Melody (*M.G.M.*)
1930—All Quiet On the Western Front (*Universal*)
1931—Cimarron (*R.K.O.*)
1932—Grand Hotel (*M.G.M.*)
1933—Cavalcade (*Fox*)
1934—It Happened One Night (*Columbia*)
1935—Mutiny On the Bounty (*M.G.M.*)
1936—The Great Ziegfeld (*M.G.M.*)
1937—Life of Emile Zola (*Warner Bros.*)

1938—You Can't Take It With You (*Columbia*)
1939—Gone With The Wind (*Selznick International*)
1940—Rebecca (do.)
1941—How Green Was My Valley (*20th Cen. Fox*)
1942—Mrs. Miniver (*M.G.M.*)
1943—Casablanca (*Warner Bros.*)
1944—Going My Way (*Paramount*)
1945—The Lost Week end (*Paramount*)
1946—Best Years Of Our lives. (*R.K.O.*)
1947—Gentleman's Agreement (*20th Century Fox*)
1948—Hamlet (*G. Arthur Rank*)
1949—All the King's men (*Columbia*)
1950—All About Eve.

BEST BRITISH FILM AWARDS

1946—The Way to the Stars.
1947—Piccadilly Incident (*Associated British Producers*)
1948—The Courtnays Of Curzon St. (*Wilcox*)
1949—Spring in Park Lane (*Wilcox*)
1950—Blue Lamp.

INDIAN FINANCE

A feature of the finances of the Government of India in 1950-51 is the buoyancy of revenues which inspite of increasing expenditures, has resulted in surpluses in the revenue part of the budget of Rs. 44·48 crores, Rs. 50·84 crores, Rs. 33·27 crores, Rs. 7·93 crores and Rs. 26·20 crores in 1947-48, 1948-49, 1949-50-51 (revised) and 1951-52 (budget) respectively. The revenue surpluses have helped to finance part of the capital expenditure. However, as the deficits on capital account have been consistently large, the overall deficit of the Central Government is placed at Rs. 43·80 crores, Rs. 54·06 crores and Rs. 51·88 crores in 1949-50, 1950-51 (revised) and 1951-52 (budget) respectively. The actual cash balance at the end of March 1951 was Rs. 151 crores as against Rs. 95 crores in the Budget Statement; from this, it would appear that the Centre had no overall deficit in 1950-51.

Additional taxation by the Central Government in 1951-52 amounts to Rs. 50·74 crores including Rs. 19·10 crores from the enhancement of railway fares.

Estimated revenue and expenditure of States, Part 'A' and Part 'B' together for 1951-52 are Rs. 389 crores and Rs. 393 crores respectively, expenditure being larger than the expenditure of the Central Government for the same year. The overall deficit of the States is of the order of Rs. 75 crores in 1951-52.

Total estimated revenue of the Central and State Governments for 1951-52 is placed at Rs. 758 crores, of which tax revenues is Rs. 633 crores or 84 p.c. The per capita taxation of Central and State Governments in 1951-52 is Rs. 18. Revenue expenditure of the Central and State Governments amounts to Rs. 735 crores of which security services and social services account for Rs. 310 crores and Rs. 150 crores or 42 p.c. and 20 p.c. respectively. The estimated capital outlay of the Central and State Governments for 1951-52 is Rs. 313 crores.

At the end of March 1951, interest bearing obligations of the Government of India aggregated at Rs. 2,562 crores; total interest-yielding assets were Rs. 1,681 crores or Rs. 65·6 p.c. of interest bearing obligations.

The gross total debt of Part 'A' States was 254·29 crores as at the end of March 1951.

CENTRAL GOVERNMENT BUDGET

1949-50 Accounts—The provisional accounts of the Government of India for 1949-50 place total revenue at Rs. 350·39 crores and total expenditure at Rs. 317·12 crores with a revenue surplus of Rs. 33·27 crores as against a deficit of Rs. 3·74 crores in the revised estimates.

1950-51 Revised Estimates.—The revised estimates of 1950-51 place revenue expenditure at Rs. 387·21 crores and Rs. 379·28 crores respectively, or Rs. 48·62 crores and Rs. 41·40 crores higher than in the budget estimates, with a revenue surplus of Rs. 7·93 crores compared with a nominal surplus of Rs. 71 lakhs originally budgeted for. The total Tax Revenue collected by the Centre including States' share of income tax was Rs. 387·95 crores as compared with Rs. 350·04 crores according to the budget estimates. Expenditure on Defence Services at Rs. 179·47 showed an increase of Rs. 11·46 crores over the original estimate.

1951-52 Budget Estimates—Total revenue for 1951-52 was estimated at Rs. 369·8 crores and expenditure at Rs. 375·43 crores, at the existing levels of taxation with a deficit of Rs. 5·54 crores. In an effort to cover part of the deficit, fresh taxation measures were proposed to yield an additional revenue of Rs. 31·15 crores converting the revenue deficit into a surplus of Rs. 25·61 crores. Of the total revenue expenditure of Rs. 375·79 crores, Defence Services account for Rs. 180·02 crores (which is Rs. 55 lakhs larger than the revised estimates for 1950-51) or 47·9 per cent. Civil expenditure for the budget year is estimated at Rs. 195·77 crores or 52·1 per cent. of the total.

Capital Budget—The revised estimate for 1950-51 place capital receipts and disbursements at Rs. 134·65 crores and Rs. 201·62 crores respectively with a deficit of Rs. 66·97 crores. Capital budget estimates of receipts and disbursements for 1951-52 show sizable increases over 1950-51 (revised) and are placed at Rs. 165·33 crores and Rs. 243·16 crores respectively with a deficit of Rs. 77·83 crores as against deficit of Rs. 66·97 crores in the previous year.

PUBLIC DEBT

General Remarks—During the year 1950-51, the public debt of the Government of India rose by Rs. 1·54 crores to Rs. 2,089 crores, and total interest-bearing obligations by Rs. 48·57 crores to Rs. 2,562 crores. As at the end of March 1951, Rs. 2,501 crores of the interest bearing obligations were obligations in India, Rs. 36 crores in England and Rs. 25 crores were dollar loans. Total interest-yielding assets on 31st March 1951 amounted to Rs. 1,681 crores or an increase of Rs. 160 crores during the year. Budget estimates for 1951-52 place net receipts from all kinds of borrowings at Rs. 56·99 crores and realisations from Cash Balance Investment Account sales at Rs. 5 crores. Including Cash Balance Investment Account transactions total net borrowings amounted to 49·08 crores in 1950-51 and are placed at Rs. 61·99 crores in 1951-52. Outstandings of Treasury Bills held by the Reserve Bank of India, States and other approved bodies showed a rise of Rs. 16·16 crores during 1950-51.

Government of India Balances and Short Term Borrowings

Balances —The total balance of the Central Government with the Reserve Bank of India and at government treasuries which amounted to Rs. 140·22 crores at the end of March 1950, declined to Rs. 130·48 crores at the end of April 1950. At the end of March 1951, the balances stood at Rs. 151·34 crores.

Treasury Bills —The total of Central Government Treasury bills sold in favour of the Reserve Bank of India during 1950-51 amounted to Rs. 1,394 crores, of which Rs. 1,119 crores was on account of renewal of *ad hocs* and Rs. 275 crores represented investments by States and other approved bodies. As on 31 March, 1951, Treasury bills outstanding on account of the Reserve Bank of India, States and others aggregated Rs. 358·02 crores.

Treasury Deposit Receipts—During 1950-51, total issue of T.D.Rs. amounted to Rs. 20·03 crores, total discharges amounted to Rs. 27·17 crores. Consequently, outstanding of TDRs declined by 7·14 crores, from Rs. 13·84 crores at the end of March 1950 to Rs. 6·70 crores at the end of March, 1951.

Long Term Debt and other Borrowings

Government of India Borrowings—Internal market borrowings during 1950-51 amounted to Rs. 30·33 crores which fell short of the budget estimate of Rs. 75 crores by Rs. 44·67 crores. The Government issued a cash-cum-conversion 3 per cent. Loan, 1964 for Rs. 30 crores and the total subscriptions amounted to Rs. 30·33 crores comprising Rs. 7·58 crores in cash and Rs. 22·75 crores by way of conversion.

Composition of Debt—The total *interest-bearing obligations* of the Government of India rose by Rs. 1,356 crores to Rs. 1,206 crores at the end of March 1939 to Rs. 2,562 crores at the end of March 1951 (revised estimates). The increase in 1950-51 was Rs. 49 crores. Total public debt including non-interest bearing debt of Rs. 213 crores at I.M.F. and I.B.R.D. and Rs. 7 crores of expired loans, stood at Rs. 2089 crores as against Rs. 950 crores on 31st March 1939. and Rs. 2,087 crores on 31 March 1950. The total interest yielding assets amounted to Rs. 1,681 crores as on 31 March, 1951 or 65·6 p.c. of the total interest-bearing obligations. In addition, cash and securities held on Treasury account amounted to Rs. 142 crores.

Reparation of Sterling Debt—During 1950-51 sterling securities of the face value of £0·04 million were repatriated at a cost of Rs. 5 lakhs and rupee counterparts of the face value of Rs. 98,370 in respect of 3½ p.c. loan 1954-59 were created.

Small Savings—Net receipts on account of small savings during 1950-51 amounted to Rs. 25·49 crores (excluding Treasury Savings Deposits) as compared with Rs. 26·18 crores in 1949-50. Net receipts on account of National Savings Certificates and Savings Bank Deposits were Rs. 17·27 crores and Rs. 13·73 crores erspectively.

Ten Year Treasury Savings Deposit Certificates.—In 1951 Government of India issued ten year Treasury Savings Deposit certificates for middle and lower income groups. The certificates which carry (tax free) interest at 3½ p.c. and are not transferable, are repayable at par on the expiry of ten calendar years.

REVENUE & EXPENDITURE OF THE CENTRAL GOVERNMENT

(In Crores of Rs.)

	Total Revenue	*Total Expenditure met from Revenue*	*Surplus (+) or Deficit (—)*
1938-39	84·47	85·11	— 0·64
1948-49*	371·70	320·86	+ 50·84
1949--50*	350·39	317·12	+ 33·27
1950-51 (Revised)	387·21	379·28	+ 7·93
1951-52 (Budget as passed by Parliament)	401·89	375·79	+ 26·10

CENTRAL GOVERNMENT DEBT

(In Crores of Rs.)

	Sterling debt	*Rupee loans*	*Small savings*	*Treasury Bills, Ways & Means advances & TDRS*	*Interest-bearing obligations*
1938-39 ..	464·94	437·87	141·45	46·30	1,205·75
1939-40 ..	439·10	450·29	135·35	54·70	1,203·86
1940-41 ..	341·11	574·55	108·79	84·90	1,247·67
1941-42 ..	206·93	611·85	95·56	136·93	1,209·21
1942-43 ..	50·56	748·74	92·77	264·70	1,353·13
1944-45 ..	34·19	1,212·14	118·47	110·61	1,532·47
1943-44 ..	34·70	1,006·55	159·18	86·70	1,860·44
1945-46 ..	33·84	1,492·20	221·52	83·33	2,282·38
1946-47 ..	32·84	1,529·73	273·20	79·20	2,359·36
1947-48 ..	26·42	1,517·09	233·10	86·84	2,162·34
1948-49 ..	24·01	1,478·39	271·73	373·33	2,440·27
1949-50 ..	23·35	1,452·15	293·80	361·48	2,499·64
1950-51 ..	21·97	1,438·46	326·25	373·20	2,550·54
1951-52 (Budget)	21·94	1,451·73	357·10	373·20	2,578·87

(Report of the Currency & Finance, 1950-51)

CAPITAL BUDGET OF THE CENTRAL GOVERNMENT

(In Crores of Rupees)

	Total Receipts	*Deficit on capital account*	*Grand Total*
1948-49*	378·13	167·48	545·61
1949-50*	182·01	80·05	262·06
1950-51 (Revised) ..	134·65	66·97	201·62
1951-52 (Budget) ..	165·33	77·83	243·16

	Total Disbursements
1948-49	545·61
1949-50	262·06
1950-51 (Revised) ..	201·62
1951-52 (Budget) ..	243·16

---

* Accounts are provisional.

GOVERNMENT OF INDIA ANNUAL TREASURY BILLS

Year	*Total amount sold*	*Amount outstanding at the end of.. the year*	*Average yield p.c. per annum*	*Amount sold to Reserve Bank of India*
1940-41	101,32,75	68,90,25	0·89	140,76,00
1941-42	118,60,00	136,97,75	0·72	291,48,00
1942-42	371,92,75	264,69,50	0·87	496,41,75
1943-44	396,18,75	110,61,25	0·90	275,72,75
1944-45	229,27,75	86,70,50	0·49	144,81,25
1945-46	117,90,75	83,33,00	0·40	161,99,00
1946-47	51,27,25	77,59,00	0·42	220,29,50
1947-48	84,56,25	98,68,25	0·45	271,33,25
1948-49	46,00,50	350,46,50	0·49	1,117,85,00
1949-50	38,75,50	341,86,25	0·51	1,381,11,75
1950-51	....	358,02,25	..	1,394,35,25

GOVERNMENT OF INDIA THREE MONTHS TREASURY BILLS

	1949-50	1950-51
Sales	38,75,50	....
Average yield	0,51	....
Discharges	38,75,50	....
Outstandings	....	....
Amount sold in favour of the Reserve Bank	1,381,11,75	1,394,35,25
Total amount oustanding including the amonut outstanding on account of Reserve Bank, States and others	341,86,25	358,02,25

GOVERNMENT OF INDIA TREASURY DEPOSIT RECEIPTS*

(*Thousands of Rupees*)

	Issued	*Discharged*	*Outstanding*
Six months:—			
1048-49 (Oct.-March)	2,48,50	....	2,48,50
1949-50	14,48,25	3,77,25	13,19,50
1950-51	16,95,00	26,52,75	3,61,75
Nine months:—			
1948-49 (Oct.-Mar.)	3,25	....	3,25
1949-50	5,00	3,25	5,00
1950-51	70,000	5,00	70,00
One year:—			
1948-49 (Oct.-Mar.)	1,37,00	....	1,37,00
1949-50	59,75	1,37,00	59,75
1950-51	2,38,25	59,75	2,38,25
Total:—			
1948-49 (Oct.-Mar.)	3,88,75	....	3,88,75
1949-50	15,13,00	5,17,50	13,84,25
1950-51	20,03,25	27,17,50	6,70,00

---

*On tap from 15th October 1948. The rates of discount are 1 p.c. 1¼ p.c. per annum respectively for six months, nine months and one year.

CENTRAL GOVERNMENT LOANS

As on 31st March, 1951

(In Lakhs of Rupees)

	Amount outstanding		*Amount outstanding*
3 % Loan 1951-54	86,72·72	2¾% Loan 1962	75,86·72
3 % „ 1953-55	114,60·58	3 % „ 1963-65	116,17·46
2¼% „ 1954	35,60·06	3 % „ 1964	30,33·10
3½% „ 1954-59	12,86·54	3 % Funding Loan 1966-68	110,11·78
2½% „ 1955	60,45·01	3 % 1st Dev. Loan 1970-75	115,05·83
4½% „ 1955-60	9,05·64	2¾% Loan 1976	14,77·48
3 % Victory Loan 1957	114,06·89	3 % Loan 1986 or Later (Conversion Loan of 1946)	248,91·90
4½% Loan 1958-68	5,85·19	3 % Non-terminable loan	8,93·36
3 % 2nd Victory Loan 1959-61	113,65·64		1,438,45·92
2¾% Loan 1960	45,63·07	Loans not bearing int.	6,36·78
4 % „ 1960-70	63,30·26		1,444,82·70
2½% „ 1961	57,00·69		

Post Office Cash Certificates

(In Lakhs of Rupees)

1944-45	35,82	1948-49	— 7,49
1945-46	38,76	1949-50	—11,36
1946-47	39,22	1950-51 (Preliminary)	—15,88
1947-48 (1st April to 14th Aug.)	37,69		
15th Aug. to 31st Mar.	— 3,07		

Post Office Defence Savings Certificates

(In Lakhs of Rupees)

	Amount outstanding		*Amount outstanding*
1944-45	6,42	1948-49	— 75
1945-46	5,92	1949-50	—1,02
1946-47	5,18	1950-51 (Preliminary)	— 78
1947-48 (1st April to 14th Aug.)	4,79		
Aug. to 31st Mar.	— 40		

Post Office National Savings Certificates

(In Lakhas of Rupees)

	Amount outstanding		*Amount outstanding*
1944-45	28,19	(15sh Aug. to 31st Mar.)	9,21
1945-46	51,30	1948-49	25,07
1946-47	70,62	1949-50	40,60
1947-48 (1st April to 14th Aug.)	74,98	1950-51 (Preliminary)	57,82

Post Office Savings Bank

(In Lakhs of Rupees)

	Amount outstanding		*Amount outstanding*
1944-45	80,22	1498-49	29,91
1945-46	1,15,04	1949-50	45,09
1946-47	1,42,35	1950-51 (Prelimnary) ..	58,82
1947-48 (1st Apl. to 14th Aug.)	1,46,82		
15th Aug. to 31st Mar.	10,12		

Post Office Defence Savings Bank*

(In Lakhs of Rupees)

	Amount outstanding		*Amount outstanding*
1944-45	8,53	1948-49	—4,07
1945-46	10,53	1949-50	—4,46
1946-47	10,93	1950-51 (Preliminary) ..	—4,64
1947-48 (1st Apl. to 14th Aug.)	6,02		
15th Aug. to 31st Mar.	—3,16		

INTERESTING-BEARING OBLIGATIONS OF GOVERNMENT OF INDIA

(In Lakhs of Rupees)

	In India	*In England*	*Dollar loans*	*Total*
1943-44	1,494.11	71,15	—	1,565,26
1944-45	1,822,65	67,24	—	1,889.89
1945-46	2,245,10	63,38	—	2,308,48
1946-47	2,323.15	58,73	—	2,381,89
1947-48	2,132.59	49,40	—	2,181,99
1948-49	2,412,96	42,84	—	2,455,80
1949-50	2,456,33	39,83	—	2,512,93
1950-51	2,500.73	36,17	24.60	2,561.50
1951-52 (Budget) ..	2,525,17	33,64	28.59	2,587,40

INTERESTING-YIELDING ASSETS OF THE GOVERNMENT OF INDIA

(In Lakhs of Rupees)

	Total interest yielding assets	*Cash and Securities held on treasury a|c.*	*Balance of total interest-bearing obligation not covered by the above table*
1943-44	1,000,08	1,59.62	405.56
1944-45	993.21	305,79	590.87
1945-46	972.66	586,65	749.17
1946-47	1,001,16	513,76	866,97
1947-48	1,160.68	246.12	775.19
1948-49	1.431,12	235.81	788.87
1949-50	1.521,39	172.99	818.55
1950-51	1,681,21	141.97	738,32
1951-52 (Budget) ..	1,722,35	52,29	812,76

---

* Closed for further deposits from 1st July, 1946.

DEBT POSITION OF THE GOVERNMENT OF INDIA SINCE 1913-14

(Crores of Rupees)

End of Mar.	*Total Re. debt*	*P.C. increase (+) or decrease (−)*	*Sterling debt*	*End of Mar.*	*Total Re. debt*	*P.C. increase (+) or decrease (−)*	*Sterling debt**
1914	179·77	—	265·81	1943	1,206·18	+28·2	55·59
1919	358·78	+99·5	304·08	1944	1,342·69	+11·3	39·14
1924	482·52	+35·5	397·76	1945	1.571·42	+17·0	38·13
1929	551·21	+14·2	472·78	1946	1.636·95	+23·3	37·69
1934	693·09	+25·7	512·15	1947	2,121·93	+ 9·6	36·52
1939	709·96	+ 2·4	469·10	9948	2.140·01	+ 0·9	29·83
1940	727·79	+ 2·6	442·49	1949	2,378·11	+11·1	27·36
1941	861·17	+18·3	344·93	1950	2,462·71	+ 3·6	43·38†
1942	941·00	+ 9·3	210·70	1951	2,513·78	+ 2·1	49·83†

PERCENTAGE OF TOTAL RUPEE DEBT

As on 31st Mar.	*G.P. Notes*	*Stock certificates*	*S.G.L. account*	*Miscellaneous (i.e., G.P. Notes and Stock certificates held in London)*
1942	53·69	15·40	30·57	0·34
1943	25·60	31·28	32·85	0·27
1944	32·65	28·88	38·27	0·20
1945	37·05	25·95	36·85	0·15
1945	37·70	22·66	39·53	0·11
1947	35·90	22·26	41·80	0·04
1948	33·04	20·94	45·99	0·03
1949	33·75	19·65	46·57	0·03
1950	33·90	18·91	47·16	0·03
1951	32·37	17·73	49·87	0·03

AMOUNT OF STERLING DEBT REPATRIATED SINCE 1937-38

	Face value	*Purchase value*		*Rupee counterparts created*
	(£ millions)	*(£ millions)*	*(Rs. crores)*	(Rs. crores)
1937-38	2·99	3·04	4·05	1·12
1939-40	17·09	16·54	22·05	22·79
1940-41	71·29	75·24	100·32	94·86
1041-42	99·04	92·28	123·04	33·58
1942-43	119·00	120·48	161·67	82·62
1943-44	13·02	12·97	17·29	38·42
1944-45	0·41	0·37	0·49	0·17
1945-46	0·28	0·29	0·37	0·01
1946-47	0·76	0·80	1·06	0·01
1947-48	4·65	5·12	6·83	0·45
1948-49	0·18	0·19	0·25	0·02
1949-50	0·08	0·08	0·11	—
Total	328·79	327·40	437·53	274·05

---

* Excludes Railway Annuities since 1942-43.

† Includes Dollar loan of Rs. 16·77 crores and Rs. 24·60 crores at the end of March 1950 and 1951 respectively.

1950-51				
1st compulsory scheme	0·022	0·024	0·032	0·010
2nd compulsory scheme	0·010	0·009	0·012	—
Redemption of 3½ p.c. Sterlin Stock 1931 or after	0·001	0·001	0·001	—
Repatriation of Ry. Debenture Stocks ..	0·002	0·003	0·004	—
Total	0·035	0·037	0·049	0·010
Grand total ..	*328·83*	*327·44*	*437·58*	*274·06*

FINANCES OF PART A STATES

General trend—The budgetary position of Part 'A' States, on revenue account for the years 1949-50 and 1951-52 is given below:—

(*Crores of Rs.*)

	Revenue	*Expenditure*	*Surplus (+) or deficit (—)*
1949-50	291·31	287·29	+4·02
1950-51 (budget)	282·56	384·29	—1·73
1950-51 (Revised	296·58	301·96	—5·38
1951-52 (budget)	308·81	311·61	—2·80

1949-50 Accounts—With revenue and expenditure at Rs. 291·31 crores and 287·29 crores rsepectively, the accounts for 1949-50 showed a revenue surplus of Rs. 4·02 crores as against surpluses of Rs. 2·47 crores in the revised estimates for the year, Rs. 8·58 crores for 1947-48 and of Rs. 7·39 crores for 1948-49.

1950-51 Revised Estimates—The revised estimates for Part A States for 1950-51 place expenditure, revenue and deficit higher than the budget estimates. Revenue at Rs. 296·58 crores and expenditure at Rs. 301·96 crores show increases of Rs. 14·02 crores and 17·67 crores respectively, with a deficit, on revenue account, of Rs. 5·38 crores as against Rs. 1·73 crores budgeted for. Allowing for transfers from reserves, total revenue and expenditure for 1950-51 would be Rs. 291·95 crores and Rs. 297·96 crores, respectively with a deficit of Rs. 6·01 crores. West Bengal accounted for the largest deficit, namely Rs. 5 crores. Compared to budget estimates, all Part A States show increased expenditure. The revised estimates of revenue are also higher than the budget estimates for most of the States. The increase in revenue is largely in Sales Tax receipts.

1951-52 Budget Estimates—The post-war trend of increasing revenues and expenditures is maintained in the budget estimates for 1951-52 also. The revenue and expenditure are at Rs. 308·91 crores and Rs. 311·61 crores and the estimated deficit is Rs. 2·80 crores. Each of the Part A States has a deficit, large or small except Bombay which has a nominal surplus of Rs. 4 lakhs. Both in 1950-51 and 1951-52, education has a larger allotment than any other item of social services in all States except in West Bengal where expenditure on medical and public health services claims the largest share. The tax revenues of Part A States have risen from Rs. 215·76 crores in 1949-50 to Rs. 219·75 crores in 1950-51 and to an anticipated total of Rs. 222·03 in 1951-52. Income tax receipts at Rs. 47·81 crores are the largest single source of tax revenues of the States and represent 22 p.c. of their total tax revenue.

Capital Expenditure—Capital outlay in 1951-52 is placed substantially higher at Rs. 109·69 crores compared with Rs. 68·88 crores in 1950-51 and Rs. 52·60 crores in 1949-50, representing an increase of Rs. 40·72 crores over 1950-51 and of Rs. 57 crores over 1949-50. Multi-purpose river valley projects, irrigation, electricity, housing and compensation to Zamindars are among the more prominent items of capital expenditure.

The estimated net receipts of the States from borrowings amount to Rs. 85·47 crores in 1951-52 against Rs. 68·05 crores in 1950-51 (revised) including in the respective years loans from the Centre (net) of Rs. 68·33 crores and Rs. 42·62 crores.

Income tax and other Payments from the Centre to Part A States—Allocations to Part A States in respect of receipts from taxes on income other than Corporation tax in 1951-52 as in 1950-51 are made on the basis of the percentage shares prescribed in the Deshmukh Award.

FINANCE OF PART B STATES

1950-51 Revised Estimates—The total revenue and expenditure of Part B States for 1950-51 (revised) on revenue account are placed at 78·53 crores and 78·37 crores respectively and show increases of Rs. 2·20 crores and Rs. 1·33 crores respectively over the budget estimates for the year leaving a nominal surplus of Rs. 16 lakhs as compared with an anticipated deficit of Rs. 71 lakhs.

1951-52 Budget Estimates—Total revenue and expenditure for 1951-52 are placed at Rs. 80·56 crores and Rs. 81·14 crores respectively showing increases of Rs. 2·03 crores and Rs. 2·77 crores over 1950-51 and leaving deficit of Rs. 58 lakhs. As compared with 1950-51, all States except PEPSU show increases in revenue while all States except Madhya Bharat and PEPSU show increases in expenditure.

BUDGETARY POSITION OF PART A STATES

(In lakhs of Rupees)

	Revenue	*Expenditure*	*Surplus+ Deficit—*	*Debt outstanding on 31st March*
Madras				
1948-49 (Accounts)	53,33	53,33	— 6	33,42
1949-50 Do.	55,89	55,54	+ 35	33,38
1950-51 (Revised)	59,70	59,07	+ 63	39,45
1951-52 (Budget)	59,63	60,30	— 67	..
Bombay				
1948-49 (Accounts)	49,91	47,06	+2,85	15,93
1949-50 Do.	61,53	61,52	+ 1	25,77
1950-51 (Revised)	65,64	65,67	— 3	32,59
1951-52 (Budget)	60,64	60,60	+ 4	..
West Bengal				
1948-49 (Accounts)	31,77	29,10	+2,67	9,73
1949-50 Do.	34,01	31,38	+2,63	15,73
1950-51 (Revised)	34,68	39,67	—4,99	24,39
1951-52 (Budget)	34,05	38,81	—4,76	..
Uttar Pradesh				
1948-49 (Accounts)	49,20	49,18	+ 2	39,42
1949-50 Do.	56,26	56,26	—	45,60
1950-51 (Revised)	52,06	53,42	—1,36	60,53
1951-52 (Budget)	61,26	61,51	— 25	..

Punjab					
1948-49 (Accounts)	..	18,08	16,89	+1,18	20,83
1949-50 Do.	..	16,95	16.12	+ 83	34.54
1950-51 (Revised)	..	16,65	16,31	+ 34	49,11
1951-52 (Budget)	..	16,63	16,84	— 21	..
Bihar					
1948-49 (Accounts)	..	23,10	21.76	+1,34	2.79
1949-50 Do.	..	25.95	25.80	+ 15	4.55
1950-51 (Revised)	..	27,63	27,08	+ 55	7,31
1951-52 (Budget)	..	35,97	31,13	+4,84	..
Madhya Pradesh					
1948-49 (Accounts)	..	17,38	16,60	+ 78	13,74
1949-50 Do.	..	19.60	19.26	+ 34	16,64
1950-51 (Revised)	..	19,04	17,54	+1,50	25,74
1951-52 (Budget)	..	20,45	20,31	+ 14	..
Assam					
1948-49 (Accounts)	..	9,24	9.56	— 32	4,62
1949-50 Do.	..	10,30	9.94	+ 36	3,33
1950-51 (Revised)	..	9.86	9,94	— 8	3,58
1950-51 (Revised)	..	9,62	10,60	— 98	..
Orissa					
1948-49 (Accounts)	..	6,20	7,34	—1,14	2,44
1949-50 Do.	..	10.82	11.47	— 65	6,70
1950-51 (Revised)	..	11,32	13,26	—1,94	11,59
1951-52 (Budget)	..	10,56	11,51	— 95	..

TOTAL BUDGETARY POSITION OF PART A STATES

(*In lakhs of Rupees*)

		Total revenue	*Total expenditure*	*Surplus+ deficit—*	*Debt outstanding*
1938-39 (Accounts)*	..	79.42	80.52	—1.10	132.90
1947-48 Do.		202.77	194.19	+8.58	118.14
1948-49 Do.	..	258.21	250.82	+7.39	142,92
1949-50 Do.	..	291,31	287.29	+4.02	186.24
1950-51 (Revised)	..	296.58	301.96	—5.38	254,26
1951-52 (Budget)	..	308.81	311.61	—2.80	....

BUDGETARY POSITION OF PART B STATES

(*In thousands of Rs.*)

		Revenue	*Expenditure*	*Surplus (+) or deficit (—)*
Hyderabad				
1949-50 (Accounts 6 months)		14,77.20	13.38.94	+1,38,26
1950-51 (Revised)	..	26.21,88	26.18.62	+ 3.20
1951-52 (Budget)	..	27,57,93	27,73,56	— 15,63
Mysore				
1949-50 (Accounts 9 months)		11,05,52	10,78.37	+ 27,16
1950-51 (Revised)	..	13,58.84	13.42.26	+ 16.58
1951-52 (Budget)	..	13,80,69	14,18,23	— 37,54
Travancore-Cochin				
1949-50 (A/cts. 7½ months)		9.23.81	7.99.29	+1,24.52
1950-51 (Revised)	..	14.32.31	14.05.46	+ 26.85
1951-52 (Budget)	..	14.87,22	14,91.13	— 4,11

---

* Include figures for the pre-partition provinces of Bengal and the Punjab.

Rajasthan			
1949-50 (Revised 6 months)	8,36,95	8,09,79	+ 27,16
1950-51 (Budget) ..	16,09,00	16,09,00	..
Madhya Bharat			
1949-50 (Account) ..	10,44,55	10,81,62	− 37,07
1950-51 (Revised) ..	10,80,62	11,83,62	−1,03,00
1951-52 (Budget) ..	11,31,00	11,36,00	− 5,00
P.E.P.S.U.			
1949-50 (Accounts) ..	5,98,51	5,64,71	+ 33,80
1950-51 (Revised) ..	5,55,87	4,96,21	+ 59,66
1951-52 (Budget) ..	4,91,50	4,89,84	+ 1,66
Saurashtra			
1949-50 (Accounts) ..	10,41,18	9,69,24	+ 71,94
1950-51 (Revised) ..	8,03,22	7,91,18	+ 12,04
1951-52 (Budget) ..	8,07,54	8,05,40	+ 2,14

(*Vide Report of Finance & Currency* 1950-51)

TOTAL BUDGETARY POSITION OF PART B STATES

(*In thousands of Rs.*)

	Total Revenue	*Total expenditure.*	*Surplus+ Deficit—*
1950-51 (Budget* ..	76,32,73	77,03,90	−71,17
1950-51 (Revised) ..	78,82,74	78,39,41	+15,33
1951-52 (Budget) ..	80,55,88	81,14,36	−58,48

* Including Rajasthan.

CONSOLIDATED DEBT POSITION OF PART A STATES

(*In Lakhs of Rs.*)

	Gross Total debt (Public & unfounded)	*Appropriation for Reduction & Avoidance of debt*	*Closing Cash Balance*
1942-43	1,70,26	1,98	20,47
1943-44	1,96,28	2,05	22,63
1944-45	1,74,35	4,57	21,86
1945-46	1,62,97	4,94	32,31
1946-47	1,57,79	4,51	16,73
1947-48	1,18,14	4,99	7,26
1948-49	1,42,92	4,25	23,68
1949-50	1,86,24	2,58	26,34
1950-51	2,54,29	2,80	17,64

(*Vide Report of Finance & Cuurrency* 1950-51)

TREASURY BILLS OF PART A STATES

(*In thousands of Rs.*)

	Amount offered for tender	*Amount tendered*	*Amount sold*	*Amount outstanding*	*Average rate of discount p.c. per annum*
					Rs. as. p.
1944-45 ..	53,50,00	89,65,00	53,50,00	10,00,00	0 8 11
1945-46 ..	36,00,00	58,52,00	35,50,00	11,00,00	0 7 0
1946-47 ..	16,50,00	25,66,50	16,50,00	9,00,00	0 7 10
1947-48 ..	6,00,00	4,00,00	4,00,00	—	0 8 0
1948-49 ..	3,00,00	1,54,00	1,54,00	—	0 12 0
1949-50 ..	13,50,00	15,50,00	13,50,00	—	0 9 6

STATE GOVERNMENT LOANS

(*As on 31st March,* 1951—*Lakhs of Rupees*)

		Amount outstanding
Assam		
3% Loan 1952	..	26·16
Madhya Pradesh		
3% Loan 1952	..	47·16
3% „ 1955	..	50·00
3% „ 1956	..	50·54
3% „ 1958	..	52·70
3% „ 1960	..	1,01·45
3% „ 1964	..	2,03·29
		5,05·15
Bombay		
3% Loan 1955	..	3,54·23
3% „ 1956	..	3,50·00
3% „ 1958	..	3,44·00
3% Dev. Loan 1960	..	3,01·88
3% Loan 1962	..	6,00·27
		19,50·27

		Amount outstanding
Uttar Pradesh		
3% Loan 1952	..	1,95·22
3% „ 1958	..	3,18·72
3% „ 1960	..	2,32·56
3% „ 1961-66	..	1,67·32
2¾% Loan 1961	..	2,37·19
3¼% E.E. Act Bonds		2,46·68
		13,97·70
Madras		
3% Loan 1952	..	2,18·95
3% „ 1953	..	1,42·08
3% „ 1955	..	1,23·25
3% „ 1956	..	1,25·10
3% „ 1958	..	1,07·95
3% „ 1959	..	1,28·96
3% „ 1960	..	2,78·44
3% Dev. Bonds 1960		4,39·75
2¾ Loan 1961	..	3,85·27
		19,49·75
Total ..	..	58,29·22

ALLOCATION OF INCOME TAX PROCEEDS, SUBVENTIONS AND GRANTS-IN-AID TO PART A STATES

(*In Crores of Rs.*)

		Income tax	*Jute duty*	*Sub-ventions*	*Other grants-in-aid*	*Total*
1939-40*	..	2·79	2·56	3·03	..	8·38
1942-43*	..	10·90	1·40	2·75	1·01	15·06
1949-50	..	45·74	1·94	0·70	2·45	53·48
1950-51 (Revised)	..	47·38	..	6·10		53·48
1951-52 (Budget)	..	46·98	..	6·71		53·69

INCOME TAX AND OTHER PAYMENTS BY THE CENTRE TO PART A STATES

Income Tax

(*Lakhs of Rupees*)

Paid to		1938-39	1949-50	1950-51	1951-52
Assam ..	..	3·00	1,37·22	1,42·14	1,40·94
Bihar ..	..	15·00	5,94·62	5,92·25	5,87·25
Bombay ..	..	30·00	9,60·54	9,94·98	9.86·58
Madhya Pradesh	..	7·50	2,74·44	2,84·28	2,81·88
Madras ..	..	22·50	8,23·32	8,29·15	8,22·15

---

* Figures relate to undivided India.

Orissa ..	.. 3·00	4,37·22	1,42·13	1,40·94
Punjab ..	.. 12·00	2,28·70	2,60·59	2,58·39
U. P. ..	.. 22·50	8,69·06	8,52·84	8,45·64
West Bengal	.. 30·00	5,48·88	6,39·63	6,34·23
Total ..	.. 1,45·50	45,74·00	47,38·00	46,98·00

Jute Duty

(*Lakh of Rs.*)

	1938-39	1949-50
Assam ..	11·69	58·08
Bihar ..	17·12	46·02
Orissa ..	0·92	7·13
W. Bengal	2,21·27	82·44
Total	2,51·00	1,93·67

Grants in Aid

(*Lakh of Rs.*)

	1938-39	1949-50	1950-51	1951-52
Assam	30·00	30·00	1,34·00	70·00
Bihar	..	..	39·00	39·00
Bombay	..	..	1,45·00	145·00
M. P.	..	..	19·00	19·00
Madras	..	..	..	..
Orissa	43·00	60·00	81·00	81·00
Punjab	..	1,75·00	75·00	..
U. P.	25·00	..	..	..
W. Bengal	..	50·00	1,17·00	1,17·00
Total	98·00	3,15·00	6,10·00	4,71·00

BULLION

Production of Gold and Silver—The production of gold in 1950 is placed at 196,848 ounces valued at Rs. 5,89,29,848 as compared with an output of 164,050 ounces valued at Rs. 4,99,00,264 in 1949. The Kolar Gold Fields accounted for 189,523 ounces or 96·3 p.c. of the total output and the mines at Hutti in the State of Hyderabad produced the balance of 7,325 ounces. The p.c. share of India's output to the estimated total output of gold in 1950 stood at 0·75 p.c. as against 0·64 p.c. of 1949.

India's output of silver showed an improvement in 1950 rising to 15,675 ounces valued at Rs. 75,031 as compared with an output of 11,275 ounces valued at Rs. 52,718 in 1949. India's share of the estimated world silver output was 0·01 p.c. in 1950, the corresponding p.c. for 1949 being 0·008.

Price Trends—Since the commencement of World War II, bullion markets in India have been functioning, more or less, in isolation from the world bullion markets owing to the restrictions imposed on imports and exports of bullion. As a result, prices of gold and silver in India have been ruling substantially higher than in world markets. Following the outbreak of the World War II, restrictions were placed on the imports into and exports from India of gold and silver. Under Sea Customs Act 1878 imports of gold and silver into India were prohibited except on the authority of a licence granted by the Reserve Bank. Simultaneously under Defence of India Rules, exports of gold and silver were prohibited except with the permission of the Reserve Bank. The emergency powers, thus assumed by the government were replaced on a statutory basis by incorporating necessary provision in either *Foreign Exchange Regulation Act* 1947 or the *Imports and Exports (Control) Act* 1947. Under Foreign Exchange Regulation

---

* The amounts payable for 1950-51 and 1951-52 are included in the grants-in-aid.

Act, imports of gold and silver into and exports of gold from India are prohibited except with the permission of the Reserve Bank. Exports of silver are controlled by the Chief Controller of Exports and exports may be made only under a license issued by him.

The contrabrand gold seized at port towns and land custom frontiers in 1950 for 9 months was 81,810 tolas.

SPOT PRICE OF GOLD & SILVER IN BOMBAY

(Gold: per fine tolas: Silver per 100 tolas gross)

	GOLD			SILVER		
	Highest	*Lowest*	*Average*	*Highest*	*Lowest*	*Average*
	Rc. as.	*Rs. as.*	*Rs. as. p.*	*Rs. as.*	*Rs. as.*	*Rs. as. p.*
1944-45 ..	76 12	61 2	71 9 4	143 4	113 10	128 10 9
1945-46 ..	97 12	63 6	80 3 0	159 6	118 0	135 1 11
1946-47 ..	111 0	84 4	101 1 2	195 0	127 0	162 4 10
1947-48 ..	117 12	95 14	108 0 4	183 13	142 8	166 12 6
1948-49 ..	121 0	103 0	114 9 10	190 8	166 8	177 9 0
1949-50 ..	119 10	107 2	114 14 11	192 12	158 14	174 11 10
1950-51 ..	120 2	104 12	113 7 4	198 12	173 14	185 14 3

(*Source:* Report of Currency and Finance 1950-51)

PRODUCTION OF GOLD IN INDIA

(In thousands of fine ounces)

			Value Rs.	
1940	289	1945 ..	.. ..	168
1941	286	1946 ..	.. ..	132
1942	256	1847 ..	4,89,54,639 ..	172
1943	252	1948 ..	5,43,20,157 ..	180
1944	188	1949 ..	4,99,00,264 ..	164
		1950 ..	5,89,29,848 ..	197

(Source: *Report of Currency & Finance,* 1950-51)

PRODUCTION OF SILVER IN INDIA

	Ounces	*Value (Rs.)*		*Ounces*	*Value (Rs.)*
1948 ..	12,797	60,299	1949 ..	11,275	52,718
			1950 ..	15,675	75,031

(Source: *Report of Currency & Finance,* 1950-51)

Quantity & Value of Imports and Exports of Gold Coin and Metal (Private and Government)

	Imports		*Exports*		*Net imports (+) or Exports (—)*	
	Oz.	*Value (Rs.)*	*Oz.*	*Value (Rs.)*	*Oz.*	*Value (Rs.)*
1945-46 ..	10,994	22,02.853	21,063	49,94,645	— 10,069	— 27,91,792
1946-47 ..	388,572	9,46.30,565	103,018	1,52,24,70	+285.554	+7,94,05,857
1947-48 ..	350,470	9,82,24.128	641	1,84,328	+349,829	+9,80,39.800
1948-49 ..	1,085	2.93.915	405	1,27,676	+ 680	+ 1,66,239
1949-50 ..	716	2.18.220	0·3	90	+ 716	+ 2,18,130
1950-51 ..	2,459	7,28,411	1,215	3,72,906	+ 1,244	+ 3,55,505

Quantity & Value of Imports and Exports of Silver

(Private and Government)

	Imports		*Exports*		*Net imports (+) or imports (—)*	
	* *Oz.*	*Value (Rs.)*	*Oz.*	*Value (Rs.)*	*Oz.*	*Value ((Rs.)*
1946-47	70,556,896	24,58,87,399	51,374	2,26,657	+70,505,522	+24,56,60,742
1947-48	26,204,748	11,60,45,235	1,501	6,737	+26,203,247	+11,60,38,498
1948-49*	1,820,195	83,66,371	122	568	+ 1,820,073	+ 83,65,803
1949-50*	149,021	5,75,011	77,870	3,56,206	+ 71,151	+ 2,18,805
1951-51*	66,216	3,26,119	488	2,333	+ 65,728	+ 3,23,786

(*Source:* Report of Currency & Finance 1950-51).

WHOLE RUPEES COINED AND ISSUED FROM MINTS SINCE 1835

(*In Rupees*)

1835-1950	* *Coined in Calcutta*	*Coined in Madras*	*Coined in Bombay*	*Coined in Lahore*	*Total Coined (Rs.)*
Victoria	133,69,06,058	10,64,29,305	5,37,12,502	....	16,39,78,572
William IV	10,90,88,070	11,78,000	207,80,44,775	....	352,13,80,138
Edward VII	39,07,38,340	....	59,21,15,212	....	98,28,53,552
George V	86,53,23,660	....	94,21,59,857	....	180,74,83,517
George VI	....	....	98,02,178	....	98,02,178
George V quaternary	....	....	86,39,66,641	20,35,25,532	106,74,92,173
George VI nickel	....	....	17,22,90,000	4,19,11,000	21,42,01,000
Asoka Pillar	....	....	1,39,00,000	....	1,39,00,000
Total	270,20,56,128	10,76,07,305	472,59,91,165	24,54,36,532	778,10,91,130

MISCELLANEOUS

CONTROL OF CAPITAL ISSUES

(*Rupees in Crores*)

	Immediate Schemes		*Long-ranged Schemes*		*Two Schemes combined*	
	No. of Companies.	*Amount Sanctioned.*	*No. of Companies.*	*Amount Sanctioned.*	*No. of Companies.*	*Amount Sanctioned.*
Total for 1950 (*Industrial & non-Industrial*) ...	238	59·81	25	14·95	263	74·75
Grand total (17*th May*, 1945 to 31st *Dec.* 1950) ..	5,480	592·62	753	432·24	6,233	1,024·85

CHEQUE CLEARANCES

(*In Lakhs of Rs.*)

1941-42	.. 26,66,34	1944-45	.. 56,26,80	1947-48	.. 64,80,14
1942-43	.. 29,79,09	1945-46	.. 65,72,37	1948-49	.. 66,68,54
1943-44	.. 45,79,22	1946-47	.. 72,21,38	1949-50	.. 61,97,92
				1950-51	.. 65,77,59

---

* Exchange Government of India Coin.

ANNUAL CIRCULATION AND ABSORPTION OF NOTES

(Annual Average—In lakhs of Rs.)

	Total Notes issued	*Notes in circulation*	*Increase or decrease in average circulation*	*P. C. of increase or decrease*
1942-43 ..	519,58	507,59	+220,11	+77
1943-44 ..	787,67	777,17	+269,58	+53
1944-45 ..	979,62	968,69	+191,52	+25
1945-46 ..	1,179,05	1,162,64	+193,95	+20
1946-47 ..	1,255.57	1,222,96	+ 60,32	+ 5
1947-48 ..	1,274,95	1,227,82	+ 4,86	—
1948-49 ..	1,253,86	1,231.84	+ 4,02	..
1949-50 ..	1,152,94	1,128,94	—102,90	..
1950-51 ..	1,180,40	1,163,21	+ 34,27	..

CIRCULATION OF INDIAN NOTES BY DENOMINATION

(In lakhs of Rs.)

	Re. 1	*Rs.* 2	*Rs.* 2-8	*Rs.* 5	*Rs.* 10	*Rs.* 20	*Rs.* 50	*Rs.* 100	*Rs.* 500	*Rs.* 1000
1942 ..	32	..	1	106.74	218,21	1	46	202,82	52	54,07
1943 ..	32	5.56	1	142,48	302,93	1	37	291.54	60	90,99
1944 ..	32	9,73	1	148,80	363.38	1	30	382.51	32	100,93
1945 ..	32	14,45	1	153.87	425,37	..	25	495.84	26	113,37
1946 ..	32	25,42	1	197.09	545.40	..	19	488,71	..	..
1947 ..	32	33,09	1	195.10	557,70	..	16	540.11	..	..
1948 ..	32	29,21	1	180.53	533,23	..	12	454,29	..	..
1949 ..	32	26.62	1	179.91	486.42	..	10	425.91	..	..
1950 ∴	31	25,15	1	166,03	403,87	..	8	500,98	..	..

ABSORPTION (METAL WISE) OF SMALL COINS

(In lakhs of Rs.)

1942-43	11,64	1946-47	5,91
1943-44	18,46	1947-48	3,99
1944-45	19,20	1948-49	24,24
1945-46	9,98	1949-50	—2,16
		1950-51	—3,20

ABSORPTION OF CURRENCY*

	Total		*Total*
Average for 7 years 1939-40 to 1945-46 ..	+182,61	1947-48	+ 53.97
1946-47	+ 31,11	1948-49	— 11,97
		1949-50	— 5.71
		1950-51	+ 86,51

---

* Figures from 1948-49 relate to Indian Union, earlier figures relate to undivided India.

* Figures from 1948-49 relate to Indian Union.

ANNUAL REVENUE, EXPENDITURE, NATIONAL INCOME AND DEBT OF INDIA

(*In Crores of Rupees*)

	Total Revenue.	*Income tax.*	*p.c. of 3 to 2*	*Total Exp.*	*Defence Exp.*	*p.c. of 6 to 5*	*Surplus (+) Deficit (—)*	*National income*	*P.c. of 2 to 9*	*Floating or short term debt.*	*Public debt.*
1	2	3	4	5	6	7	8	9	10	11	12
1938-39	84	16	19	85	46	54	— 1	..	..	46	1,179
1944-45	336	165	49	496	395	80	—160	..	..	87	1,610
1945-46	361	150	42	484	360	74	—123	..	..	83	1,975
1946-47	343	131	38	343	207	60	..	..	..	79	2,158
1947-48*	179	85	47	185	87	47	— 6	..	..	87	2,170
1948-49†	372	140	38	321	146	45	+ 51	8,710	4	373	2,405
1949-50†	350	115	33	317	149	47	+ 33	..	..	361	2,506
1950-51 (Revised)	387	119	33	379	179	47	+ 8	..	..	373	2,564
1951-52 (Budget)	492	117	29	376	180	48	+ 26	..	..	..	..

INDEX NUMBERS ON VARIOUS SUBJECTS

ALL INDIA INDEX NUMBER OF SECURITY PRICES

(Base 1938 = 100)

Average of weeks	*Govt. & Semi Govt. Securities*	*Fixed Dividend Industrial Securities*	*Variable Dividend. Industrial Securies*	*Govt. of India*	*States*	*Municipal, Port or improvement Trusts*
1946-47 ..	104·7	140·6	252·5	105	107	103
1947-48 ..	103·3	120·2	181·5	103	104	102
1948-49 ..	102·0	109·4	136·5	102	102	98
1949-50 ..	101·2	101·9	115·4	101	99	97
1950-51 ..	100·0	101·0	124·2	100	99	97

Sub Group Indices of Fixed Dividend Industrial Securities

	Electricity	*Cotton*	*Jute*	*Coal*	*Iron*	*Sugar*	*Paper*	*Plantations*
1946-47 ..	102	203	144	149	118	152	137	153
1947-48 ..	85	185	125	133	100	129	127	136
1948-49 ..	81	166	112	116	89	129	121	126
1949-50 ..	80	151	95	109	90	112	104	110
1950-51 ..	82	147	91	105	92	107	98	112

(Column 3 excludes States share of Income tax).

* From 15th August 1947 to 31st March 1948.

† Accounts not finalised.

Sub Group Indices of Variable Dividend Industrial Securities

	Banks	Insurance	Investment Trust	Electricity & Tram	Shipping & Transport	Railways	Plantations
1946-47 ..	195	292	297	137	295	105	284
1947-48 ..	152	206	229	104	193	95	223
1948-49 ..	133	159	193	87	144	91	157
1949-50 ..	122	123	173	84	99	91	124
1950-51 ..	123	124	163	89	94	92	153

Cotton Woolen & Silk mills	Jute mills	Coal	Mining & oil	Iron & Steel	General Engineering	Sugar	Breweries	Chemicals	Paper	Cement
437	275	284	196	278	324	219	322	282	367	208
298	183	188	116	198	336	116	183	203	254	147
202	112	129	82	150	192	138	117	176	125	134
155	84	108	61	134	154	116	105	157	99	120
158	93	121	72	160	176	101	102	173	114	136

(*Source:* Report of Finance and Currency 1950-51)

INTERIM INDEX OF INDUSTRIAL PRODUCTIONS

(*Base 1946 = 100*)

	General Index	Coal	Sugar	Paints & varities	Cement	Glass
1947 ..	97·5	103·9	97·6	100·5	93·9	65·5
1948 ..	108·9	103·2	116·5	93·0	100·7	71·6
1949 ..	106·3	108·0	108·5	80·5	136·3	39·5
1950 ..	105·2	110·8	105·8	72·8	169·4	109·5

	Refractories	Plywood	Paper & Paper Brand	Matches	Yarn	Cloth
1947 ..	112·0	58·3	87·8	113·0	94·8	96
1948 ..	120·8	91·4	91·6	129·4	105·9	110·5
1949 ..	133·1	81·2	97·4	127·8	99·4	99·9
1950 ..	149·4	85·4	102·7	127·0	85·9	93·3

Source: Ministry of Commerce & Industry and Monthly Abstract of Statistics, June, 1951

INDEX NUMBERS OF MARKET VALUE OF INDIAN INDUSTRIAL SHARES

(*Base 1937 = 100: Average of months*)

1942 ..	109	1945	183	1948 ..	131
1943 ..	150	1946 ..	244	1949 ..	99
1944 ..	169	1947 ..	183	1950 ..	103

Source: International Financial Statistics issued by I. M. F.

MOVEMENTS IN PRICE INDICES SINCE DEVALUATION AND KORIAN WAR

(Base: August 1939 = 1000)

	August 1949	*March* 1950	*June* 1950	*Dec.* 1950	*March* 1951
Food Articles ..	410·6	396·2	402·8	423·9	412·0
Industrial raw materials	460·5	490·1	490·7	533·8	608·9
Semi-manufactures ..	330·8	338·2	335·5	351·0	381·4
Manufactured Articles ..	348·6	347·4	347·6	350·0	387·2
Miscellaneous ..	541·6	630·6	692·0	718·0	753·4
All commodities ..	389·0	392·4	395·6	412·6	438·6

Source: Economic Adviser to the Government of India.

INDEX NUMBERS OF WHOLESALE PRICES

A Sensitive Series

Base: Week Ended 19th August 1939 = 100

	Agriculture Commodities	*Raw materials*	*Primary articles*	*Manu- Manu- articles tured*	*Chief Chief of Export Articles*	*Index General*
1939-40 ..	127·5*	118·8*	124·2*	131·5*	130·5*	125·5*
1940-41 ..	108·6	121·5	113·4	119·8	114·1	114·8
1941-42 ..	124·2	146·9	132·5	154·5	137·3	137·0
1942-43 ..	166·2	165·9	166·0	190·4	161·7	171·0
1943-44 ..	268·7	185·0	132·5	251·7	236·4	244·2
1944-45 ..	265·4	206·0	240·5	258·3	243·9	244·2
1945-46 ..	272·8	210·0	246·2	240·0	248·9	244·9
1046-47 ..	313·8	235·3	280·0	259·1	296·8	275·4
1947-48 ..	356·9	354·0	312·6	287·8	..	307·0

Source: Report of Currency & Finance, 1950-51

B. General Purpose Series

(Base: Year ended August 1939 = 100

	Food articles	*Industrial Raw materials*	*Semi-manufactures*	*Manufactured articles*	*Miscellaneous*	*General Index*
1947-48 ..	306·1	377·5	261·6	286·4	456·2	308·2
1948-49 ..	382·9	444·8	327·3	346·1	525·2	376·2
1949-50 ..	391·3	471·7	331·6	347·2	570·7	385·4
1950-51 ..	416·4	523·1	348·9	354·22	707·4	409·7

---

* Seven months ended March 1940.

ALL-INDIA INDEX NUMBERS OF SECURITY PRICES

(*Base: Year ended August, 1939=100*)

	Cereals	*Pulses*	*Other articles of food*	*All food articles general Index*	*Textile products*	*General Index*
1947 Average ..	312	471	232	292	314	297
1948 „ ..	445	426	269	375	406	368
1949 „ ..	466	439	277	390	398	381
1950 „ ..	472	451	314	411	402	401

Source: Office of the Economic Adviser of the Govt. of India

BROADCASTING IN INDIA

Early History—The first development of Radio in India began with a Radio Club at Madras in 1924, but regular service was inaugurated by the Indian Broadcasting Company when the first station was opened in Bombay on July 23, 1927 and Calcutta station was opened on August 26, 1927. Before these dates a number of low power stations in various parts of India were working. But Indian Broadcasting Company did not prosper at all. Government of India refused any monetary help to this Company when approached. So from March, 1930, the Company went into liquidation.

But there was an universal demand that broadcasting should continue in India without any interruption. As a result of various representations, Government decided to take over the radio as an experimental measure. With effect from 1st April, 1930, it was placed under the direct control of the Government of India in the Department of Industries and Labour under the designation of '*Indian State Broadcasting Service*'.

But the position of broadcasting in India did not improve. The Government again decided to close down the service as it was being run at a considerable loss. The decision to close down was announced on the 9th October, 1931. This announcement caused considerable agitation everywhere. It became however clear that new sources of revenue had to be found out if broadcasting was to continue in India. It was decided that customs receipts should be increased and it was also decided to rescind the order to close down the service. The duty on wireless receiving apparatus was fixed at 50 per cent with effect from 1st April, 1932, it was definitely decided to continue the Indian State Broadcasting Service under State management.

Since then there has been steady progress. Today All India Radio is a vast organization under the Director-General of Broadcasting with a net work of regional stations all over India. Each station is under a Station Director. A.I.R. has now at its command a most powerful battery of transmitters capable of covering at least four continents direct. Even in its present set-up, A.I.R. is Asia's biggest institution of its kind.

Since 15th August 1947, the number of radio stations has increased from six to twenty one in 1951 including the stations taken over from the integrated states.

A.I.R. net-work now consists of 21 stations and four auxiliary units. The rate of increase of licences is now between 10,000 to 11,000 per month.

Organisation—Broadcasting is now a central subject under the Consutitution and the A. I. R. is a wing of the Department of Information and Broadcasting of the Government of India. It is under the Minister of Information and Broadcasting. The Minister is advised by standing Committee of ten members elected by the Parliament. The head of the organisation is the Director-General, A.I.R. Above the Director-General is the Secretary of the Department of Information and Broadcasting who is responsible to the Minister-in-charge. Director-General is assisted by four Deputy Director-General. On the engineering side, at the head of the organisation is the Chief Engineer at New Delhi. Each station has its own Station Engineer.

India's New Constitution and A.I.R.—The new constitution brought with its important changes in the policy as well as size of the organisation. This choice of Hindi as national language is reflected in A.I.R. programmes in a number of ways. Hindi as evolved by A.I.R. in the light of Article 351 of the new constitution was to be simple in diction so as to have maximum intelligibility. The volume and variety of broadcasts in Hindi from stations located in the predominantly Hindi areas were increased by modifying the linguistic composition of their programmes. In December, 1950 stations in the non-Hindi area inaugurated popular courses of lessons in Hindi in their respective regional languages. News bulletins in Hindi are also broadcast from stations in non-Hindi areas.

Revenue—The chief sources of revenue are customs duty on wireless apparatus, license fees and subscription and advertisement revenues from radio journals. There is an annual licence fee of Rs. 15 per each domestic receiver. The licenses are issued by the Posts and Telegraphs Department. The traders in wireless apparatus have to take out special import licenses.

Journals—Five Radio Programme Journals, i.e., *Indian Listener* (English), *Awaz* (Urdu), *Sarang* (Hindi), *Betar Jagat* (Bngali), *Vanoli* (Tamil) and *Navovani* (Gujerati), are published by the A. I. R.

Varied Broadcasts—All-India Radio broadcasts daily 33 news bulletins in 12 languages in its Home Services. The news service is centralised at Delhi to secure uniform standard of authenticity and objectivity in such broadcasts all over the country. A.I.R. now broadcasts sixty-nine news bulletins in 23 languages over fourteen hours a day.

Every year, stations of All-India Radio put out on the air approximately 36,000 hours of varied items such as music, news, talks, drama, etc. of this, music forms nearly 44 p.c. news about 18 p.c. and external services about 14 p.c. All-India Radio library of gramophone records (including electrical recordings) contains over 71,000 items.

The details of the various broadcasts given by the All-India Radio is given here—

External Broadcasts—A.I.R.'s External Service broadcasts are carried by a net-work of high power transmitters and have an average daily output of 21 hours a day. These are directed to countries in East and South-East Asia, East and South Africa and to the Middle East and are made in English Burmese, Kuotu, Cantonese, Indonesian, Pushtu, Afghan, Persian and Arabic. For the large number of Indians overseas programmes in Hindi, Tamil and Gujarati are also included in the External Services. An experimental service to Europe has now grown into a regular service. In July 1950 three additional services directed to the West Indies, South-East

Asia, East and South Africa and Mauritus were inaugurated. Efforts to interest foreign broadcasting organisations in relaying selected programmes from Delhi have proved successful. From May 10, 1950 arrangements have been made for the Teheran radio to relay A.I.R's Persian service once in a fortnight. Australian Broadcasting Corporation regularly includes in its house services a recorded feature sent by AIR. Two way discussions between Delhi and London has also started on such subjects as public affairs, literature, science etc.

Industrial Area Broadcasts—The Calcutta, Bombay, Ahmedabad, Lucknow and Madras stations broadcast special prograammes for workers in factories and other establishments. The Calcutta programme is broadcast daily in Bengali and Hindustani and is addressed to the worker. The Bombay programme is broadcast three times a week in Marathi, Gujerati and Hindusthani.

School Broadcasts—are meant to supplement the routine lessons through instructive subjects at schools and not to act as substitute for the teacher. The usual duration of a school broadcast is half-an-hour.

Armed Forces Broadcasts—During the War, Delhi started special programmes in Hindustani for Indian troops in India and abroad. After the war and from 15th August 1947, the troops programme has been given a new orientation. The programme is now broadcast only for 40 minutes daily in the afternoon.

Farm Forum—is a new broadcast introduced during past two years. The speciality of this is participation of listeners and it deals with subject like talks on compost, manure making and subjects of rural interest.

Radio Reporting—has now become a regular feature of A.I.R. programmes. It covers national festivals, cultural activities and sports.

Rural Broadcasts—In a country like India when vast majority of the people live in rural area, need for specialised programme for rural audiences cannot be over-estimated . So the regional stations of A.I.R. are now devoting a major portion of evening hours to special programmes for villages. The installation and maintenance of radio sets in rural broadcasts is now the responsibility of the State governments. Free radio sets have been installed by provincial governments, such as Delhi and Madras for villagers. Calcutta and Bombay stations broadcast special programmes for rural listeners.

Contact with Public—Contact with Public for keeping programme policy in consonance with the main trends of the public opinion is maintained by the machinery of the *Advisory Committees* of various types. The *Regional Programme Advisory Committees* which function at certain stations include members of the Parliament residing in the respective regions. *Educational Consultive Panels* are attached to the stations at Delhi, Bombay, Calcutta and Madras, while *Language Advisory Committees* are attached to Delhi and Lucknow.

Advisory Committees—There is a regional programme Advisory Committee in all stations. Educational consultive panels are attached to the stations at Delhi, Bombay, Calcutta and Madras,. Language Advisoory Committees are attached to the stations at New Delhi and Lucknow. Stations at Delhi and Bombay have consultive panels for Indian music, Rural Advisory Committees are attached to the stations at Delhi, Tiruchi, Madras and Vijayawada.

Research—The Research Department has been carrying out important investigations in regard to the broadcasting service in India and its development. The Planning and Development unit has been engaged on the design of transmission insulators, the design and construction of studios.

AIR Monitoring Service—A.I.R. monitoring service at Simla keeps a watch on transmissions from all the main broadcasting stations in the world. The service monitors news, commentaries, and selected talks transmitted from these stations in English, Indian languages and in some foreign languages. The service monitors broadcast in 12 different languages from as many as 24 different countries.

A.I.R. Staff Training School—The All-India Radio opened a *Staff Training School* in 1948 for the training of new entrants into the service, both programme and technical as well as of the existing members of the staff. On the *technical side,* trainees receive instruction on the physical properties of the medium as well as on the complicated chain of technical processes between the broadcaster and the listener. On the *programme side,* instruction consists of a series of lectures, demonstrations and practical exercises on every aspect of broadcasting. There is also another section to the school to train engineer apprentices. Here the training is of post-graduate standard and lasts for about six months.

Listener Research Unit—This unit of A.I.R. continuously tries to keep in touch with the news and interests of its listeners. In order to study the trends in listening and the shifts in public taste, contact with listeners is maintained by a system of listening panels, postal enquiries and sample surveys.

Some interesting World Statistics—The U.K. (227) is the second to America (466) with a number of radio sets per 1,000 inhabitants. In many countries such as Pakistan and Iraq the ratio is as low as one set per 1,000 people. Countries with less than 10 sets per 1,000 people include Kenya with two, Jamaica with seven, Equador with nine, Malaya with four and Greece with six. Only four countries in the world are broadcasting regular television programmes. They are the United States (98 transmitters; over 3,700,000 sets; the U.K. (two transmitters; 250,000 sets); Russia (two transmitters; 50,000 sets) and France (two transmitters; 25,000 sets). The totals for television receiving sets are rough estimates.

NUMBER OF RADIO RECEIVER LICENCES

	No. of Receiver Licences		*No. of Receiver Licences*
1927	3,594	1941	1,47,121
1930	7,719	1942	1,65,675
1933	10,872	1943	1,76,061
1936	37,797	1944	1,93,585
1937	50,680	1945	2,02,829
1939	92,772	1946	2,32,368
1940	1,19,417	1947	2,56,161
		1951	603,710

NEWS SERVICES

	No. of daily News bulletins	*No. of Languages*	*Daily duration of news bulletin in minutes*
1939	9	3	95
1945	25	8	274
1948	38	13	425

REVENUE FROM CUSTOMS DUTY

	(*Rs.*)		
1939-40	20,58,040	1942-43	32,22,441
1940-41	17,49,812	1943-44	11,49,313
1941-42	21,63,896	1944-45	3,16,086
		1945-46	10,45,318

RADIO RECEIVERS IMPORTED

	No.	*Value Rs.*		*No.*	*Value Rs.*
1939-40	43,684	40,62,139	1943-44	5,384	7,43,919
1940-41	38,866	35,31,956	1944-45	895	1,50,947
1941-42	52,416	41,73,266	1945-46	5,982	7,04,197
1942-43	18,930	19,70,027	1946-47	1,07,111	1,69,61,790

IMPORTANT DATES OF BROADCASTING IN INDIA

1924—First Radio Club in India in Madras on May 16, 1924.
1927—Bombay Station of the Indian Broadcasting Co. opened on July 23, and Calcutta opened on August, 1927.
1930—Indian Broadcasting Co. went into liquidation on March, 1920 and Broadcasting was placed under the direct control of the Government of India and its name was changed to "Indian State Broadcasting Service."
1939—Designation of the Indian State Broadcasting Service changed to "All-India Radio."
1939—In December, first foreign language service opened.
1943—Broadcasting House opened at Delhi.
1947—Broadcasting started at Patna (26th January) and Cuttack (27th January).
1948—Broadcasting started at Shillong and Gauhati (1st July).
1948—Broadcasting started at Srinagar (Kashmir) 1st July.
1948—Broadcasting started at Nagpur (16th July).
1948—Broadcasting started at Vijayawada (1st Dec. 1948).
1948—Baroda Station taken over by Government of India (16th Dec. 1948).
1949—Allahabad Station opened on 1st February, 1949.
1949—Jodhpur Station went on the air on 26th Jan. 1949.
1949—Jullundur Station opened on May 16.
1949—Ahmedabad Station opened on April 16.
1950—Calicut Station opened on June 1.
1950—Stations of Mysore, Trivandrum, Hyderabad and Aurangabad incorporated in AIR on 1st April.
1950—Dharwar Station opened on Jan. 8.

INDIAN METEOROLOGY

The Meteorological Department was started in 1875 as a result of the findings of the Famine Commission.

The India Meteorological Department is organized into two central offices, *viz.*, the administrative headquarters at Delhi and the technical headquarters at Poona, from which all India weather reports are issued, and five regional meteorological offices located at Bombay, Calcutta, Delhi, Madras and Nagpur. The Colaba and Alibag Observatories (Bombay) specialize in terrestrial magnetism, seismology and atmospheric electricity. The Kodaikanal Observatory is specially equipped for spectroscopic observations and specializes in the study of solar physics.

The demands of civil aviation continue to be on the increase, particularly at the international airports of Bombay, Calcutta and Delhi and in the Bengal-Assam area in connection with the Assam air-lift. The extension of the night air-mail scheme to cover the monsoon months necessitated extensions of weather watch to cover night hours at meteorological stations on the air-routes.

With a few minor exceptions, the service provided to aircraft at all the principal aerodromes is in conformity with the procedure recommended by the ICAO.

During the year 1951 the modernization of the upper air organization of the department was undertaken to enable it to meet the needs of jet-plane air services which require information regarding the winds at altitudes of forty to fifty thousand feet. As usual, weather reports and climatological information are supplied to army commands and "meteor" reports to artillery units. Meteorological service to the navy continues as before. Fleet synoptics for the Indian Ocean is prepared twice daily at the Poona meteorological office and broadcast through the Poona meteorological radio (VWR).

Steps to set up the long projected Central Seismological Observatory at Shillong has been taken during the year 1951. To study the after-shocks, seismographs has been installed at Shillong, Tocklai (Jorhat) and Tezpur in Assam.

A small training section is maintained by the department at Meteorological Office, Poona, to train new entrants and give refresher courses to the technical personnel of the department.

Meteorological, seismological and other instruments continued to be manufactured in the department workshops at Poona and New Delhi. In fact most of the meteorological instruments, except thermometers, can now be made within the country. Some new typs of meteorological instruments, such as a rainfall recording instrument which can operate for six months without attention, and a rainfall intensity recorder were constructed in 1951.

AVERAGE RAINFALL IN INDIA

	Inches		*Inches*
Shillong	84·64	Calcutta	62·98
Darjeeling	126·42	Allahabad	41·82
Simla	61·04	Lucknow	40·02
Ootacamund	55·56	Delhi	26·24
Madras	49·92	Kanpore	35·91
Bombay	71·21	Dehra Dun	85·04

Srinagar	25·87	Bangalore	35·37
Cuttack	59·97	Patna	46·69
Jabalpore	55·11	Banaras	40·55
Nagpur	49·24	Agra	26·90
Poona	27·11	Ahmedabad	28·83
Hyderabad (Deccan)	31·66		

NORMAL RAINFALL IN PROVINCES

Madras—		*Punjab—*	
Malabar	100·3	P. East and North	23·4
Madras S. E.	35·7	P. South-West	10·1
Madras Coast, North	37·9	*Bihar—*	
Bombay—		Chotanagpur	52·6
Gujarat	32·5	Bihar	48·4
Konkan	107·4	*Orissa*	57·6
Bombay, Deccan	30·4	*Madhya Pradesh—*	
Bengal	74·7	M. P. West	46·6
Uttar Pradesh—		M. P. East	53·8
U. P. East	39·8	Berar	32·5
U. P. West	37·1	*Assam*	100·3
Andamans & Nicobars	116·2	*Kashmir*	41·4
Hyderabad—		*Central India—*	
North	34·4	West	34·6
South	29·7	*Rajputana—*	
Mysore	36·2	East	42·3
		West	12·8
		East	26·0

ANNUAL MAXIMUM & MINIMUM TEMPERATURES

	Maximum	*Minimum*		*Maximum*	*Minimum*
Shillong	69·9	53·5	Kanpore	89·0	66·0
Darjeeling	58·6	47·9	Cuttack	90·9	72·2
Simla	62·4	49·4	Dehra Dun	81·4	60·3
Srinagar	67·7	43·7	Lucknow	89·7	66·0
Abu	75·8	62·0	Agra	90·4	63·0
Ootacamund	66·0	49·1	Meerut	87·8	63·7
Kodaikanal	63·6	50·8	Delhi	88·8	64·5
Bombay	86·8	73·8	Ahmedabad	84·6	70·6
Madras	92·2	74·9	Jabalpur	88·2	63·6
Calcutta	88·5	70·2	Nagpur	92·1	70·1
Patna	87·	68·9	Poona	89·4	4·7
Banaras	89·5	56·5	Hyderabad (Dn)	90·3	64·4
Allahabad	90·1	66·4	Bangalore	83·7	63·8

FOOD PROBLEMS IN INDIA

General Position—The food situation in India has been difficult throughout the past four years and during the early part of 1951 certain parts of the country seemed to be on the verge of famine. The food deficit has become chronic since the thirties. The separation of Burma reduced internal supplies of foodgrains by 1·3 million tons, and the partition in 1947 by a further ·77 million tons. The last Bengal famine and persistent deficits since then are an evidence that India's food problem is not a temporary disequilibrium between production and requirements; it is a manifestation of the continually growing pressure of population on limited food supply. It has therefore to be resolved not through short-term expedients, but through careful and sustained application of relatively long term measures.

The ever increasing number of population and the aftermath of partition have greatly aggravated India's food situation. However, India has been a deficit country in food production mainly due to her primitive system of agricultural economy. Although food controls and rationing were first introduced as an emergency measure in the early years of the war, the country has been still following several forms and varieties of procurement and distribution arrangements on controlled basis. Over the greater part of the country administration is fully, although not everywhere effectively, organised. In some States it has been subject to strains on account of insufficient supplies, but on the whole, it has functioned fairly well, considering the magnitude of the task. Although 82% of the pre-partition population remained in India, only 69% of the irrigated area, 65% of the wheat and 68% of the rice area came her share.

The food problem may be viewed in terms of five sets of factors, namely, the overall requirements to be met, the extent of rationing commitments undertaken by Government, the extent to which internal supplies can be procured, the magnitude of imports and the prospects of increasing internal production. Present and future policies shall have to be determined on an assessment of the likely trends bearing on each of these factors.

Food position worsens in 1950—The year 1950 opened with an optimistic outlook for the food position in the country. The year opened with stocks with States amounting to 1·58 million tons which were the largest for the last three years; the kharif harvest of 1949-50 season was reported to be good and the prospects of rabi crops were greatly assuring. In view of this improvement, it was decided to reduce food imports to 1·5 million tons for one year 1950 as against 3·7 million tons in 1949, to intensify procurements in the surplus as well as deficit regions and to bring about an increase in the quantities offered by the surplus States and a reduction in the requirements of the deficit areas. As the year 1950 advanced, the food situation, however, began to cause concern as a result of serious damage to crops by a cold wave and hailstorm in the north and north-western parts of the country, followed later in the year by an earthquake in Assam, extensive rains and floods in Bihar, eastern U.P., the Punjab, PEPSU, West Bengal and Orissa, and a failure of the north-eastern monsoon in Madras for the fourth year in succession. Both kharif and rabi crops were badly affected, the overall damage to crops being estimated at about 5·5 million tons. The influx of refugees from East Pakistan into West Bengal further strained the food situation, while scarcity conditions affected Rajasthan. As a result, the demand on the Union Government for food supplies increased, while procurement slowed down. It was decided in April 1950 to revise the import target upward. Efforts were made to expedite imports from all available quarters and total imports during the year 1950 amounted to 2·16 million tons as against the original target 1·5 million tons. Procurement during 1950 amounted 4·63 million tons as against a target of 5·16 million tons. In addition to enhanced imports, stocks had to be drawn upon to the extent of about 8·35 lakh tons, the stocks at the close of the year 1950 declining to 7·46 lakh tons.

On the basis of a rationed population of about 125 million, it was estimated the total offtake of foodgrains during 1951 would be about 9 million tons. Internal procurement was expected to be somewhere between 3 to 4 million tons, leaving a gap of about 5 to 6 million tons to be filled by imports. In addition, the short-fall in stocks as at the end of the year of about 9 lakh tons had to be made good and reasonable reserves to be built up. The import target for 1951 was revised and increased to 4 million tons and with a view to getting this additional quantity of foodgrains, India approached the USA for an *ad hoc* assistance to the extent of 2 millon tons of foodgrains. In response, the U.S. Government passed on 15th June 1951 the India Emergency Food Aid Act of 1951 in terms of which India has been allowed a long term loan of $190 million for purchase, during the period ending June 1952, of 2 million tons of food grains in the U.S.A. Meanwhile, arrangements are being made to import foodgrains from Australia, Burma, Canada, China, Russia and other countries. The total imports for 1951 are placed at 5·5 million tons including one million tons out of the two million tons expected from the U.S.A. under the Food Aid Act.

As an emergency measure, the quantity of foodgrains ration was reduced from 12 ounces to 9 ounces in all States from 19 January 1951, the concession of the additional ration of 4 ounces in respect of the heavy manual workers having been retained. The basic ration of the heavy manual workers was, however, restored to 12 ounces on 19 February, 1951. The food position became critical towards the close of the year in some parts of the country, notably in Bihar and Madras. Efforts were made to relieve the situation in the affected areas by rushing large supplies of food, by opening ration shops and relief works, etc.; signs of improvement were appreciable by the close of the year. Last year two committees were appointed, namely, the Foodgrains Procurement Committee and the Foodgrains Investigation Committee. The former recommended the introduction of a uniform system of monopoly procurement and rationing all over the country. The Foodgrains Invstigation Committee recommended, among other things, supply of thoroughly cleaned and pure grains in the ration, provision of facilities to trade for construction of warehouses, reduction in the incidental charges and improvement in railway administration with a view to reducng losses in transit to a minimum.

Unified Food Control: During 1950 the Essential Supplies (Temporary Powers) Act, 1946 was amended to make among other things excessive hoarding punishable with a term of imprisonment which could be extended to 7 years or a fine not less than 20 times the quantity of foodgrains found in the possession of the hoarders. The amended Act which was extended to Part B States came into force on August 17, 1950. Food controls all over the country are now regulated by one Central Act and the procedure for trying offenders has been simplified.

Bonus and Subsidies—In January 1948 a bonus scheme was introduced to induce all the States to step up their production and procurement, and encourage exports from surplus States and thus reduce the need of foreign imports. The bonus was to be spent on Grow More Food scheme or schemes which would increase procurement. From January 1, 1951 a revised scheme has been introduced. Its main points are: (1) no bonus is payable on grain procured by a State for its internal consumption, (2) the net import and export quotas will be fixed for each State for each year and bonus will be paid on the following basis:

For net exporters: No bonus will be paid if exports fall below 50% of the export quota. A graded scale will be paid for exports above 50%. If exports exceed the quota the bonus will be at the rate of Rs. 1-8-0 per maund on the excess quantity.

For net importers: No bonus will be paid if imports exceed 25% of the net import quota.

The linking of the bonus to import and export targets, will induce exporting States to increase their targets while importing States will keep their import requirements to the minimum. As against Rs. 120 million paid in 1950-51 as bonus, the estimate for 1951-52 is Rs. 40 million.

With the increase in imports it became difficult for the Government of India to bear the burden of subsidies on the price of imported grains. With effect from Jan. 1, 1951, the Centre's responsibility for subsidising imported foodgrains has been restricted to selected industrial and urban areas, and only the grain required for consumption in such areas will be issued at subsidised rates. In 1950-51, Rs. 20·77 million were paid as subsidy as against an estimate of Rs. 21·32 million in 1951-52.

Food Imports—The total imports of foodgrains during 1950 amounted to 2·125 tons valued at Rs. 802 million. The import programme for 1951 envisages an import of 4·0 millions tons estimated to cost about Rs. 1,600 million.

As a result of India signed the Wheat Agreement, the country was able to obtain her guaranteed purchases of wheat at prices cheaper than in the open market. The purchases under the agreement have been increased from 10,42,000 metric tons to 1·5 million metric tons.

Procurement and Rationing—The quantity of procurement for 1950 was estimated at 5·16 million tons but because of the short-fall in production, procurement was 4·63 million tons. This consisted of 26·9 million tons of rice, 1·12 million tons of wheat and 820,000 tons of other cereals. Bombay, Madhya Pradesh, West Bengal and Mysore practically achieved their respective targets while Punjab, U.P., Jammu and Kashmir, Madhya Bharat, P.E.P.S.U., Saurashtra, Bhopal and Vindhya Pradesh exceeded them. At the end of 1950, 124·8 million persons were under rationing system, of whom 45·4 million were under statutory rationing and the remainder under other types of rationing. During the year 1950, 292 steamers brought foodgrains to India for which Rs. 8·4 million was paid as net freight.

Overall requirements—Defects in agricultural statistics introduce an element of uncertainty in estimating the overall deficit which has to be met. The Draft Five Year Plan has prepared a plan for making India self-sufficient by 1956. The existing gap between production and requirements and that which may come to exist in 1946 as population increases, if meanwhile production does not increase, may be seen from the following statement as given in the Draft Five Year Plan.

1. Estimated Population (millions)	1950	357·4
	1956	383·1
2. Estimated Adult equivalent population	1950	307·4
At 86% (millions)	1956	329·5

3. Production of cereals in 1950 (lakh tons) .. 455·2
4. Quantity of cereals available in 1950 for consumption if there are no imports and allowance is made for seed etc. at 12½ per cent (lakh tons) .. 1950 398·3
5. Quantity available for consumption in 1950 including imports (lakh tons) .. 427·9
6. Availability per day per adult (ounces) in .. 1950 13·67
7. Requirements for consumption (including seed, etc.) in 1936 *In lakh tons*

On the basis of	13·67	oz. per adult per day			..	524·24
Do.	do.	14 oz.	do.	do.	..	536·90
Do.	do.	15 oz.	do.	do.	..	575·30
Do.	do.	16 oz.	do.	do.	..	613·60

8. Deficit compared to production at the 1950 level .. *In lakh tons*

On the basis of	13·67	oz. per adult per day			..	69·04
Do.	do.	14 oz.	do.	do.	..	81·70
Do.	do.	15 oz.	do.	do.	..	120·10
Do.	do.	16 oz.	do.	do.	..	158·40

To maintain consumption at the level of 1950, the additional quantity of foodgrains needed in 1956 will be 7 million tons; to raise consumption to 14, 15, and 16 ounces per day per adult, the additional quantity estimated is 8·2, 12·0 and 15·8 million tons respectively. The following table will illustrate the imports and procurement which are important factors in maintaining the rationing system.

Year	*Opening stock*	*Procurement*	*Import*	*Offtake*	*Closing stock*
1947	1,132	4,211	2,369	7,067	645
1948	645	2,693	2,836	5,130	1,044
1949	1,044	4,610	3,619	7,690	1,581
1950*	1,581	4,634	2,165	7,634	746

* Provisional.

The availability at present is by no means uniform between different parts of the country. If imports from abroad are excluded, availability per day per adult of the main cereals varied in 1950 from over 20 ounces in Madhya Pradesh or 17 in Punjab to 12 in Bombay and Madras.

Programme of integrated production—An all out drive to meet the country's shortage in foodgrains and the main commercial crops, the improvement of Indian agriculture in various directions and the development of agricultural research and extension work are the important developments in this direction.

During the two years 1948-50 the various schemes completed under the "Grow More Food Campaign" have produced an additional 174,000 tons of foodgrains as against a target of 187 million tons. This left a balance 3·06 million tons to be achieved during 1950-52 on the basis of an estimated deficit of 4·8 million tons to be made up by March 1952, the target date of self-sufficiency in food production. This self-sufficiency is to be achieved through:—(1) construction of about 79,000 new wells, (2) installation of about 19,000 water lifting appliances; (3) land improvement work covering approximately 1·5 million acres; (4) distribution of approximately 260,000 tons of fertilisers, 1·7 million tons of manure and approximately 96,000 tons of improves creal seeds; (5) improving the fertility of the soil.

While the need for increasing food production was imperative, the growing difficulties in securing certain essential raw materials like cotton and jute made it necessary to plan for expanding the cultivation of these commodities also. The entire position was therefore reviewed and it was decided to merge the Grow More Food Campaign into a programme of integrated production embracing all the three commodities. The necessary executive machinery was set up under unified control. Production is to be increased through an extension of the cultivated area as well as a more efficient use of the land under cultivation.

Extension of cultivations—It is estimated that not more six million acres can really be classified as cultivable waste land which can be reclaimed. The State Governments have been advised to take necessary steps for the survey of such lands and also to enact legislation to enable the Government to require the cultivation of all cultivable land. Several States have already passed such legislation .

Land reclamation—Through the efforts of the Central Tractor Organisation about 80,000 acres of land were reclaimed during the period January to June, 1950. During the first of 1951, the traget of reclamation is about 240,000 acres through the use 240 new tractors and old ones. Orders will be placed for the balance of 135 tractors suitable for Indian conditions from the loan of the International Bank. A refresher course for training mechanics and drivers was organised in November, 1950 at which about 140 candidates were trained. In 1949 a loan of ten million dollars was obtained from the International Bank for the purchase of 375 heavy tractors to reclaim 3 million acres of waste land over a period of seven years. Units of 15 tractors have been created and distributed to different States, namely U.P., Madhya Pradesh, Bhopal and Madhya Bharat. Due to the efforts of the Central Tractor Organisation, about 183,374 acres of lands have been reclaimed during the three years ending 1949-50. Of this reclaimed lands, U.P. has reclaimed 58,543 acres, Madhya Pradesh 76,270 acres, Madhya Bharat 16,535 acres, Bhopal 18,509 acres and Punjab 13,517 acres.

Short term expedients—A more efficient use of cultivated land is being made through a series of short term projects designed to produce quick results. The schemes are sponsored by the State Governments and are subsidized jointly by the Centre and States. They include (1) works schemes, such as construction of wells, tanks, channels etc., and (2) supply schemes, such as distribution of fertilisers, manures, composts and improved seeds. High priority is of course being given to permanent schemes because of their continuous effect on foodgrains production. In future all new schemes for intensive production are concentrated in selected zones where close contact will be established between the production and procurement authorities. One of the conditions of financial assistance in the case of intensive area schemes, is that 60% of the increased production should be surrendered to the Government as procurement.

Special efforts have been made for the construction of tube wells because of their direct contribution to food production. The Governments of U.P., Bihar and Punjab have entered into contracts with an English firm for the construction of 440 tubewells in U.P., 300 in Bihar, and 225 in the Punjab. These tube-wells have been constructed within a period of two years and the supply of irrigation of facilities will be under State control. It is estimated that the total area irrigated by the new tube wells will be about 290,000 acres. Under the Five Year Plan, the broad objective of the agricultural programme during the next five years is to secure an increase in the production of food by 7·2 million tons.

UNITED NATIONS

How U. N. came—The necessity for forming an United Nations Organization was first discussed at Dumbarton Oaks, Washington D. C. August 21—Oct. 7, 1944. It was finally put to concrete shape by the delegates of 50 Allied Nations assembled at San Francisco from April 25 to June 26, 1945 where representatives of 50 nations signed the United Nations Charter.

Purposes of U. N.—Four purposes of the U.N. are—(1) to maintain international peace and security (2) to develop friendly relations among nations based on respect for the equal rights and self-determination of peoples (3) to co-operate in solving international problems of an economic, social, cultural and humanitarian charater and in promoting respect for human rights and fundamental freedoms for all and (4) to be a centre for harmonizing the actions of nations in attaining these common ends.

Date of Inauguration—The U. N. came into existence on October 24, 1945.

Principles—The United Nations are founded on the following principles:

1. The organisation is based on the principle of the sovereign equality of all its members.

2. Members are to fulfill in good faith the obligations they have assumed under the Charter.

3. They are to settle their international disputes by peaceful means.

4. They are to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the United Nations.

5. They are to give the U.N. every assistance in any action it takes in accordance with the Charter, and to refrain from giving assistance to any State against which the organisation is taking preventive or enforcement action.

6. The U.N. is to ensure that non-members act in accordance with these principles so far as is necessary for maintaining international peace and security.

7. The organisation is not to intervene in matters essentially within the domestic jurisdiction of any State. This provision does not apply, however, when enforcement action is taken with respect to threats to the peace, breaches of the peace and acts of aggression.

Finance–The United Nations is financed by the contributions from member States. Member States contribute to the expenses of the budget and Working Capital Fund on a scale determined by the General Assembly each year on the recommendation of its Committee on Contributions.

Principal Organs—U. N. has six principal organs: General Assembly, Security Council, Economic and Social Council, Trusteeship Council, International Court of Justice and the Secretariat.

Languages—In all the organs of the U.N. other than International Court of Justice, the official languages are Chinese, French, English, Russian and Spanish and the working languages are English and French. In the

General Assembly, Spanish is also working language. The official language of the International Court are French and English.

Members of the United Nations —Afghanistan, Argentina, Australia, Belgium, Bolivia, Brazil, Byelorussian S.S. Republic, Burma, Canada, Chile, China, Colombia, Costa Rica, Cuba, Czechoslovakia, Denmark, Dominician Republic, Equador, Egypt, El Salvador, Ethiopia, France, Greece, Guatemala, Haiti, Honduras, Iceland, India, Indonesia, Iran, Iraq, Lebanon, Liberia, Luxemburg, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Pakistan, Panama, Paraguay, Peru, Philippines, Poland, Saudi Arabia, Siam, Sweden, Syria, Turkey, Ukrainian S.S., South Africa, U.S.S.A., United Kingdom, U.S.A., Uruguay, Venezuela, Yemen, Yugoslavia, Israel.

Flag of the United Nations—White U.N. emblem (global map projected from the North Pole and embraced in twin olive branches) centred on a rectangular blue banner.

ORGANS OF THE UNITED NATIONS

1. **General Assembly** —All member States are represented in the General Assembly. It is the main organ of the U.N. Each member may have five delegates but only one vote. The General Assembly meets once a year in September. All decisions on important questions are made by a two-thirds majority of those present and voting; a simple majority will suffice other less important questions.

Its main functions are to consider and make recommendations on the principles of international co-operation in the maintenance of peace and security, including the principles governing disarmament and regulation of armaments, to discuss and move recommendations on any world problem, to make recommendations for the peaceful settlement of any situation which might impair friendly relations among nations.

Organisation—The General Assembly does most of its work in committees, of which there are four types: Main Committees, Procedural Committees, Standing Committees and *ad hoc* Committees.

Main Committees deal with agenda referred to them by General Assembly and prepare recommendations for submission to its plenary meetings and are six in number: 1. First Committee (Political and Security including Regulation of Armaments); 2. Second Committee (Economic and Financial); 3. Third Committee (Social, Humanitarian and Cultural); 4. Fourth Committee (Trusteeship including non-self-governing territories); 5. Fifth Committee (Administrative and Budgetary); 6. Sixth Committee (Legal).

Procedural Committees deal with organisation and conduct of the Assembly's business and are two in number: 1. General Committee; 2. Credentials Committees.

Standing Committees deal with continuing problems and have two Committees: 1. Advisory Committee on Administrative and Budgetary question. 2. Committee on contributions.

Other standing bodies established by the Assembly are: Board of Auditors, International Law Commission, Investments Committee, U.N. Staff Pension Committee.

Ad Hoc Committees: General Assembly or any of its Committees may appoint Committees for special purposes, such as U.N. Special Committee on the Balkans. U. N. Commission on Korea, U. N. Conciliation Commission for Palestine etc.

Interim Committee—popularly known as "Little Assembly" was set up in 1947. As a subsidiary organ of the Assembly it was to assist the latter in carrying out its functions. Though opposed by U.S.S.R. group who have not participated, it has been established for an indefinite period.

Five permanent member are China, France, U.S.S.R., United Kingdom and United States. Non-permanent members are elected by the General Assembly for two-year term. Each member has one representative.

2. **Security Council**—Eleven members, five of them permanent and six elected by the General Assembly compose the Security Council, the organ on which Member States have conferred primary responsibility for maintaining peace and security.

Its functions are to maintain international peace and security, to investigate any dispute which might lead to international friction, to use economic or military sanctions to prevent or stop aggression.

Decisions on all procedural matters are made by affirmative vote of at least seven members. Decisions on other (*i.e.* substantive) matters are made by an affirmative vote of seven members, including the concurring votes of the permanent members except that any member must abstain from voting in decisions concerning the pacific settlement of a dispute to which he is a party. (A negative vote by a permanent member on a matter of substance is popularly referred to as a "veto").

Because the maintenance of peace requires constant vigilance and may call for prompt action, the Security Council is in permanent session and generally meets at least once a fortnight.

Subsidiary organs reporting to the Security Council are:

(*a*) *Military Staff Committee*—Composed of the Chiefs of the Staff of Five permanent members (or representatives) advises and assists the Security Council on questions of military requirements for maintenance of peace, etc.

(*b*) *Atomic Energy Commission* set up by General Assembly reports to the Security Council and is accountable to it on all matters affecting security. All members of the Security Council are represented to it and in addition Canada when that country is not a member of the Security Council.

(*c*) *Committee for Conventional Armaments* for the general regulation and reduction of armaments and armed forces.

(d) *Standing Committees*—Such as Committee of Experts on rules of procedure and other technical matters and Committee on the Admission of new members.

(*e*) *Ad hoc Committees and Commissions* established when required to deal with temporary questions i.e. U. N. Commission on Indonesia, U. N. Commission on India and Pakistan.

3. **Economic and Social Council**—is composed of eighteen members elected by the General Assembly. The Council is responsible for promoting (1) higher standards of living, full employment, and conditions of economic and social progress and development, (2) solutions of international economic, social, health, and related problems, (3) international cultural and educational co-operation and (4) universal respect for and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language or religion.

The Council works through (A) *Regional Commissions* as some problems could be best dealt with on regional basis such as, Economic Commission for Europe (ECE), Economic Commission for Asia and the Far East (ECAFE) and Economic Commission for Latin Americt (ECLLA).

(B) *Functional Commissions.*

They are—(1) *Economic and Employment Commission,* (2) *Transport and Communications Commission,* (3) *Fiscal Commission* (4) *Population Commission,* (5) *Social Commission,* (6) *Human Rights Commission,* (7) *Commission on Narcotic Drugs,* (8) *Commission on Status of Women,* and (9) *Statistical Commission.*

(C) *Standing Committees* consisting of (1) Committee on Negotiations with Inter-governmental Agencies, (2) Council Committee on Non-Governmental Organizations, (3) Agenda Committee, (4) Interim Committee on Programme Meeting.

(D) *Ad Hoc Committees.*

(F) *Special bodies,* such as Permanent Central Opium Board, Supervisory Body, U. N. International Childrens' Emergency Fund, Administrative Committee on Co-ordination, Interim Co-ordinating Committee for International Commodity Arrangements.

4. **Trusteeship Council**—United Nations accept as a sacred trust the obligations to promote the well-being of non-self-governing peoples in territories held either under League of Nations mandates or detached from enemy countries after World War II or whose population voluntarily wish to place themselves under the Council.

Further, the members of the United Nations have set up an international trusteeship system for the administration of territories placed under United Nations' supervision through trusteeship agreements.

Trusteeship system can apply to territories formerly held under the League of Nations mandate, territories taken from enemy States as outcome of World War II; territories voluntarily placed under trusteeship system.

The Trusteeship Council consists of (1) an equal number of member States administering and not administering Trust Territories, (2) permanent members of the Security Council which do not administer Trust Territories and enough other non-administering countries elected by the Assembly for three year terms, as will ensure that the membership of the Council is equally divided between administering and non-administrating members.

The present membership consists of (*a*) Administering countries—Australia, Belgium, France, New Zealand, United Kingdom and U.S.A.; (*b*) other countries—China, Iraq, U.S.S.R.; Philippines, Dominician Republic, Argentina.

Trusteeship territories—(1) New Guinea (*Australia*), (2) Ruanda-Urundi (*Belgium*), (3) French Cameroons and French Togoland (*France*), (4) Western Samoa, (*New Zealand*), (5) British Cameroons, British Togoland, Tanganyika (*United Kingdom*), (6) Nauru (*Australia*). (7) Marianas, Marshalls and Carolines formerly belonging to Japan (*U.S.A.*).

5. **International Court of Justice**—Its purpose is to act as principal judicial body of the United Nations. It is a Court of Law and deals with legal questions only, not with political disputes.All countries parties to the Court can refer to it any case they wish. In addition, Security

Council may refer a legal dispute to the Court and all organs of the U.N. can ask the Court for an advisory opinion on any legal question.

The Court consists of fifteen Judges elected by the General Assembly and the Security Council voting independently.

Secretariat—is composed of a Secretary-General appointed by the General Assembly upon the recommendation of the Security Council and such staff as the organisation may require. Secretary-General is the Chief Administrative Officer of the United Nations. He is assisted by an international staff recruited on the basis of their qualifications.

Departments of the Secretariat—(a) Department of Security Council Affairs, (*b*) Department of Economic Affairs, (c) Department of Social Affairs, (*d*) Department of Trusteeship and Information, from non-self-governing countries, (*e*) Department of Public Information, (*f*) Legal Department, (*g*) Department of Conferences and general services, (*h*) Department of Administrative and Financial Services.

SPECIALISED AGENCIES OF THE U.N.

International Labour Organisation (ILO.)—The I.L.O. has as its motto; "If you wish for peace, work for justice." As inter-governmental agency, it seeks by international action to improve labour conditions, raise living standards and promote economic and social stability.

In 1944, I.L.O. adopted what is known as *"Declaration of Philadelphia"* outlining the objectives of I.L.O. It affirms these principles: that labour is not a commodity; that freedom of expression and of association are essential to sustained progress; that poverty anywhere constitutes a danger to prosperity everywhere; and that war against want requires to be carried out with unrelenting vigour within each nation and it maintains—"all human beings irrespective of race, creed, or sex have the right of pursue both their material well-being and their spiritual development in conditions of freedom and dignity of economic security and equal opportunity.

It was established on 11 April, 1919, as an autonomous institution associated with the League of Nations. Its original constitution formed part of the treaty of Varsallies and treaties of peace. *I.L.O. Headquarters*: Geneva, Switzerland.

I.L.O.'s machinery consists of (1) *International Labour Conference* which is I.L.O.'s highest authority. It is the policy making authority of the organisation. It meets annually and composed of national delegations comprising two government delegates and one delegate each representing management and labour. The chief function of the Conference is to formulate international social standards in the form of conventions; (2) *Governing body* comprises the representatives of 16 governments, eight management members and eight labour members. (c) *Internatinnal Labour Office* is the secretariat of the I.L.O., collects and distributes information on all subjects within organization's competence.

Food and Agriculture Organisation of United Nations (FAO.) — The chief aims of F. A. O. are—(1) To help nations raise the standard of living (2) to improve nutrition of the peoples of all countries (3) to increase the efficiency of farming, forestry and fisheries, (4) to better the condition of rural people and, through all these means, to widen the opportunity of all people for productive work. F.A.O. was founded in October 16,1945. *Head quarters*: 1201 Connecticut Ave, Washington 6 D.C.

United Nations Educational Scientific and Cultural Organisation (UNESCO)—"The purpose of the organisation" declares Article I of the UNESCO constitution "is to contribute to peace and security by promoting collaboration among the nations through education, science and culture in order to further universal respect for justice, for rule of law and for the human rights and fundamental freedoms, which are affirmed for the peoples of the world without distinction of race, sex, language or religion by the charter of the United Nations." It was established on 4th Nov. 1946. *Office*—Unesco House, Avenue Kleber, Paris 16 France.

International Civil Aviation Organisation (ICAO)—is designed to solve the problem of international civil aviation and establishment of international standards and regulations for civil aviation. The aims and objects of ICAO are to develop the principles and techniques of international air navigation and to foster the planning and development of international transport. It was established on 4th April, 1947: *Headquarters*: Dominion Square Building, Montreal, Canada.

International Bank for Reconstruction and Development (BANK)—is designed to assist in the reconstruction and development of territories of members by facilitating the investment of capital for productive purposes, to promote private foreign investment, to supplement private investment by providing finance for productive purposes, to conduct operations with due regard to the effect of inter-national investment on business conditions in territories of members and to assist in bringing about a smooth transition from a war time to a peace time economy in the immediate post war years.

The activities of the Bank and International Monetary Fund are complementary.

The Bank works through a Board of Governor, Executive Director, a President and a staff.

The authorised capital of the Bank is $10,000,000,000. This capital stock is divided into shares of $100,000 each available for subscription only to members and transferable only to the Bank. The smallest subscription being for two shares and the largest that of U.S.A. for 31,750 shares. The Bank is authorised to call only 20 p.c. of the Capital subscribed by members for use in its operations. The remaining 80 p.c. of the subscription of each member is subject to call only if needed to meet obligations of the Bank for fund borrowed or on loans guaranteed by it.

International Monetary Fund (FUND)—The International Fund was established to facilitate the expansion of balanced growth of international trade and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objectives of economic policy.

To promote exchange stability, to maintain orderly exchange arrangements among members, and to avoid competitive exchange depreciation.

To give confidence to members by making the fund's resources available to them under adequate safeguards.

The Fund works through a Board of Governors, Executive Directors and a Managing Director and a staff.

To carry out its functions, the Fund has resources subscribed by the member governments.

Difference between Bank and Fund—Difference between the two is that the Bank *lends* while the Fund *sells*. The Bank does not arrange currency transactions—that is a job for the Fund, which also negotiates for the removal of currency restrictions. The Bank on the other hand, assists by long-term credits for reconstruction and development; it can make a direct loan out of its own funds or out of funds raised in the market of a member-State, and will assist a country in financing irrigation or hydro-electric power projects.

Loans given to countries by the International Bank

The membership of the International Bank at June 30, 1951 was 49 countries, the same as that of 'International Monetary Fund, there being 40 'original' members and 10 who had joined subsequently, whilst Poland an 'original' member had resigned in March 1950. The quotas of member countries are follows in millions of U.S. dollars.

Australia	200·0	El Salvador	1·0	Pakistan	100·0
Austria	50·0	Ethiopia	3·0	Panama	0·2
Belgium	225·0	Finland	38·0	Paraguay ,	1·4
Bolivia	7·0	France	525·0	Peru	17·5
Brazil	105·0	Greece	25·0	Philippines	15·0
Canada	325·0	Guetamela	2·0	South African	100·0
Ceylon	15·0	Honduvas	1·0	Syria	6·5
Chile	35·0	Iceland	1·0	Thailand	12·5
China	600·0	India	400·0	Turkey	43·0
Colombia	35·0	Iran	33·6	U. K.	1,300·0
Costa Rica	2·0	Iraq	6·0	U. S. A.	3,175·0
Cuba	35·0	Italy	180·0	Uruguay	10·5
Czechoslovakia	125·0	Lebanon	4·5	Venezuela	10·5
Denmark	68·0	Luxemburg	10·0	Jugoslavia	40·0
Dominician Rep	2·0	Mexico	65·0		
Equador	3·2	Netherlands	275·0		
Egypt	53·3	Nicaragua	0·8		8,338·5
		Norway	50·0		

India's holdings in I.M.F.—India's holdings of currency in the International Monetary Fund are highest amongst Asiatic countries. These holdings include non-negotiable and non-interest bearing notes of Rs. 224,96,40,000 (equivalent to 472·42 million dollars). India is the fourth highest holder after U.K., U.S.A., and France.

World Health Organisation (WHO)—The constitution of the WHO defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". It sets down as the objective of the Organisation "the attainment of all peoples of the highest possible level of health." The WHO works through World Health Assembly, an Executive Board and a Secretariat. It came into being on April 7, 1948. *Headquarter*: Palais des Nations, Geneva, Switzerland.

Universal Postal Union (UPU)—Its purpose is to alleviate the uncertainty, confusion and excessive cost of international postal communications by uniting its members countries in a single postal territory for the reciprocal exchange of mail. Its aim is to insure the organisation and improvement of postal services throughout the world through international collaboration.

UPU fixes the international rates for all types of postage—letters, postcards, packages, samples, periodicals, books, etc., specifying the minimum and maximum rates which may be charged by any postal administration in the world.

It was established in 1874 by Universal Postal Convention of Berne, Switzerland and its headquarters are at Berne, Switzerland.

International Telecommunication Union (ITU)—The organization through which countries now regulate international tele-communication was formed in 1934 but reorganised in 1947. The I.T.U. has threefold missions—(1) to maintain and extend international co-operation for the improvement and rational use of tele-communication. (2) To promote the development and most efficient operation of technical facilities by establishing standards and operating rules in order to improve tele-communication services, increase their usefulness and, as far as possible, make them generally available. (3) To harmonise the action in the attainment of these common ends.

Two organisations, the I.T.U. founded in Paris in 1865 and International Radiotelegraph Union founded in Berlin in 1906 were merged by the Madrid Convention of 1932 to form International Telecommunication Union. I.T.U. came into being on Jan. 1, 1934.

International Refugee Organisation (IRO)—The functions of the IRO are: (1) the repatriation of refugees and the displaced persons, (2) their identification, registration and classification, (3) their care and assistance, legal and political protection, (4) their transport and (5) their resettlement and re-establishment in countries able and willing to receive them. The IRO was officially established on August 20, 1948.

World Meteorological Organisation (WMO)—This organisation as stated in the preamble to its convention, is established with a view to co-ordinating, standardising and improving world meteorological activities and to encouraging an efficient exchange of meteorological information between countries in the aid of human activities.

The WMO will come into existence after 30 States have ratified or acceded to the convention adopted on October 11, 1947.

Inter-governmental Maritime Consultive Organisation (IMCO)—This organisation when it comes into being—will provide inter-governmental co-operation concerning all matters relation to international shipping; to encourage the highest standards of maritime safety and efficiency of navigation; to promote the availability of shipping services to the commerce of the world without discrimination; to consider unfair restrictive protection by shipping concerns—will not come into being until 21 nations, of which 7 must each have a total tonnage of at least one million gross tons of shipping had become parties to convention.

International Trade Organisation (ITO)—As provided in the Havana Charter, the objectives of the ITO, when it comes into existence are:—to assure a large and steadily growing volume of real income and effective demand, to increase the production, consumption and exchange of goods, to help promote industrial and general economic development, to encourage international flow of capital for productive investment, to further the enjoyment by all countries on equal terms of access to the markets, products and productive facilities for their economic prosperity and development, to promote the reduction of tariffs and other trade barriers and the elimination of discriminatory treatment in international commerce, to enable countries to abstain from measures disrupting world commerce and reducing employment and to facilitate the solution of problems relating to international trade in the fields of employment, economic development, commercial policy, business practices and commodity policy.

SPORTS—INDIAN AND WORLD

INDIAN CRICKET

Foreign Teams in India

G. F. Vernon's Team—First English team visited India in the year 1888-89. It was captained by famous Middlesex cricketer, G. F. Vernon. Twelve matches were played of which they won ten, lost one and drew one.

Lord Hawke's Team—Lord Hawke, the famous English cricketer brought out another English team in the year 1892-1893. The team played 23 matches, of which they won 15, lost 2 and drew 6.

Oxford University Authentics—This English team visited India in the year 1902-3. They played 19 matches, of which they won 12, lost 2 and drew 5.

M. C. C.'s Unofficial Team (1926-27)—The first M. C. C. team to tour India under the captaincy of Arthur Gilligan in 1926-27; played 34 matches, of which 11 were won, none lost and 23 drawn.

M. C. C. Team (1933-34)—came under the captaincy of D. R. Jardine, The team played 34 won 17, drew 16 and lost 1.

Lord Tennyson's Team (1937-38)—The team came under the captaincy of Lord Tennyson. It played 24 matches, won 8, lost 5 and drew 11.

Australian Team (Unofficial 1935-36)—The team was captained by J. S. Ryder. It played 23 matches, won 11, lost 3; drew 9.

Australian Services XI (1945)—This team was captained by A. L. Hasset. It played 9 matches, won 1, lost 2 and drew 6.

West Indies Team (1948-49)—played 17, won 5, lost 1, drawn 11. Captain: John Goddard.

Commonwealth Team (1949-50)—played 17, won 8, lost 2, drawn 7. Played 5 unofficial Test matches, won 1, lost 2, drawn 2.

Commonwealth Team (1950-51)—played 26; won 13; played 5 unofficial Test matches, won 2, drawn 3.

Indian Teams in Foreign Countries

Parsi Team in England—Parsi team visited England in 1886 and 1888.

Maharaja of Patiala's Team in England (1911)—pliyed 23, won 6, lost 15, drawn 2. Captain—Maharaja of Patiala.

All India Team in England (1932)—played 31, won 13, lost 9 drawn 9. Captain Maharaja of Porabandar.

All India Team in England (1936) Played 31, won 5, lost 13, drawn 13. Captain—Maharajkumar of Vijianagram.

All India Team in England (1946)—Played 33, won 13, lost 4, drawn 16. Captain—Nawab of Pataudi.

All India Team in Australia (1947-48)—Played 19, won 4, lost 7, drawn 8. Captain—Lala Amarnath.

Official Test Matches

India v. *England* .. 1932 (In England)—Played 1, won by England 1.
1933-1934 (In India)—Played 3, won by England 2, drawn 1.
1936 (In England)—Played 3, won by England 2, drawn 1.
1946 (In England)—Played 3, won by England

1, drawn 2.

India v.*Australia* .. 1947-1948 (Played in Australia)—Played 5, won by Australia 4, drawn 1.

India v. *West Indies* .. 1948-49 (Played in India)—Played 5, won by W. Indies 1, drawn 4.

India's Test Records

Highest Individual Score—146 V. S. Hazare *v.* England, Delhi, 1951.

Highest Match Aggregate—658 (381,277)—20 wkts. *v.* Australiia Adelaide, 1947-48.

Century in each Innings—116 and 145 Hazare *vs.* Australia, Adelaide, 1947-48.

Highest total for an Innings—454 *v.* W. Indies, 1st innings, Delhi, 1948.

Lowest total for an Innings—58 *vs.* Australia, Brisbane, 1947-48.

Century at first appearance—118 Amarnath *vs.* M.C.C. Bombay, 1933-34.

Most wickets in a match—8 for 141 Amar Singh *vs.* M.C.C. Madras, 1934.

CRICKET CHAMPIONSHIP OF INDIA

Winners of Ranji Trophy

[RANJI TROPHY—*A gold cup presented by the Maharaja of Patiala in memory of the famous batsman, Prince Ranjitsinji.*]

1934-35 and 1935-36 Bombay; 1936-37 Nawanagar State; 1937-38 Hyderabad; 1938-39 Bengal; 1939-40 and 40-41 Maharashtra; 1941-42 Bombay; 1942-43 Baroda; 1933-44 Western India; 1944-45 Bombay; 1945-46 Holkar; 1946-47 Baroda; 1947-48 Holkar; 1948-49 Bombay; 1949-50 Baroda; 1950-51 Holkar.

Ranji Trophy Records

912 runs—Holkar *v.* Mysore for 8 wickets (1945).

826 runs—Maharashtra *v.* Western India States (1948).

798 runs—Maharashtra v. Northern India (1940).

784 runs—Baroda *v.* Holkar (1946).

764 runs—Bombay *v.* Holkar, (1944)

735 runs—Bombay *v.* Maharashtra (1943).

632 runs for 7 wickets—Bombay *v.* Maharashtra (1947).

620 runs—Bombay *v.* North India (1949).

618 runs—Holkar *v.* Bengal (1942).

613 runs—N. India (7 wickets) *v.* N.-W.F.P. (1941).

World record for any wicket—By Gul Mahomed and Hazare (4th wickets partnership)—577 runs *v.* Holkar (1941), (*highest score for any wicket*).

675 runs—Maharashtra *v.* Bombay (1940).

658 runs for 8 wickets—S. Punjab *v.* N. India (1945).

650 runs for 9 wickets—Maharashtra *v.* Baroda (1949).

650 runs—Bombay *v.* Maharashtra (1940).

645 runs—Bombay *v.* Baroda, 1945.

638 runs for 8 wickets—Bombay *v.* Sind (1947).

Highest individual centuries in one innings—Six centuries by Holkar *v. Mysore* (1945-46)—(*a world record*).

Highest aggregate in one innings—1325 runs by Maharashtra *vs.* Bombay at Poona (1941-42).

Lowest Victory—By one run, Bengal *vs.* Bihar (1941-42).

Smallest Totals—22 runs, S. Punjab *v.* N. India (1934).

Highest Individual Scores in the Ranji Trophy

*443—B. B. Nimbalkar (Maharashtra) against Western Indian States (1948-49).

*359—V. M. Merchant (Bombay) against Maharashtra (1943-44).

319—Gul Mahomed (Baroda) against Holkar (1946-47).

*316—V. S. Hazare (Maharashtra) against Holkar (1944-45).

288—Hazare (Baroda) against Holkar (1946-47).

278—V. M. Merchant (Bombay) against Holkar (1944-41).

*249—D. Compton (Holkar) against Bombay (1944-45).

246—D. B. Deodhar (Maharashtra) against Bombay (1940-41).

*245—R. S. Modi (Bom.) against Baroda (1944-45).

*234—V. M. Merchant (Bombay) against Sind (1945-46).

*233—S. Mustaq Ali (Holkar) against U.P.

217—V. M. Merchant (Bombay) against W. India (1944).

217—U. M. Merchant (Bombay) against Hyderabad (1947).

*230—K. C. Ibrahim (Bom.) againist N. W. India (1941-42).

*222—Capt. Wazir Ali (S. Punjab) against Bengal (1938-39).

*218—S. W. Sohoni (Maharashtra) against W. I. States 1940-41.

*209—Ram Prakash (N. India) against Maharashtra (1940-41)

203—J. Naomal (Sind) against Nawanagar (1938-39).

202—Rangnekar (Bombay) against Maharashtra (1940-41).

200—C. K. Naidu (Holkar) against Baroda (1945-46).

Rahinton Baria Inter-University Cricket

[*Gold cup presented by Mr. A. D. Baria of Bombay to perpetuate the memory of his son, Rohinton Baria who died at an early age.*]

1935--36 Punjab University; 1936-37 Punjab University; 1937-38 Punjab University (walk over); 1938-39 Bombay University; 1939-40 Bombay University; 1940-41 Bombay University; 1941-42 Bombay University; 1942-43 Bombay University; 1943-44 Punjab University; 1944-45 Bombay University; 1945-46 Bombay University; 1946-47 Bombay University; 1947-48 Bombay University; 1948-49 Bombay University.

FOOTBALL

I. F. A. Shield

(*Started in the year 1893*)

1930 Seaforth Highlanders; 1931 H. L. I.; 1932 2nd Bn. Essex Regt.; 1933 D. C. L. ;; 1934 *Game abandoned;* 1935 East Yorks; 1936 Mahomedan Sp.; 1937 6th Field Brigade; 1938 East Yorks; 1939 Police A. C.; 1940 Aryans; 1941-42 Mahomedan Sp.; 1943 East Bengal; 1944 B. & A. Rly.; 1945 East Bengal; 1946 *Tournament abandoned;* 1947 Mohan Bagan; 1948 Mohan Bagan; 1949-51 East Bengal.

First year's winner: Royal Irish Rifles, 1893.

Champions (3 successive years): Gordon Highlanders (1908-10); Calcutta F. C. (1922-24); Sherwood Foresters (1926-28); East Bengal (1949-51).

Winners of the highest number of times—Calcutta F. C.—9 times.

Rovers Cup, Bombay

1930 K. O. S. B.; 1931 Royal W. Kents; 1932 Royal Irish Fusiliers; 1933 King's Liverpool Regt.; 1934 Sherwood Foresters; 1935-36 King's

---

* Not out.

R-S.

Liverpool Regt.; 1937-38 Bangalore Muslims; 1939 28th Field Brigade; 1940 Mahomedan Sporting, Calcutta; 1941 Welch Regiment; 1942 Bata Sp. Club (Calcutta); 1943 R. A. F.; 1944 British Base Reinforcement Camp; 1945 Military Police; 1946 British Base Reinforcement Camp; 1947 *No Play;* 1948 Bangalore Muslims; 1949 East Bengal; 1950-51 Hyderabad Police.

Durand Cup

1950 Hyderabad Police; 1951 East Bengal.

National Football Championship

(*Santosh Memorial Trophy*)

[The trophy for the championship was donated by the I.F.A. (Bengal) at a cost of Rs. 1,500 to perpetuate the memory of the late Sir Manmatha Nath Ray Chaudhury of Santosh, who was the president of the I. F. A. for many years.]

1940	Bengal.	1947	Bengal.
1941	Bengal.	1949	West Bengal.
1942-43	No Play.	1948	No Play.
1944	Delhi.	1949	West Bengal.
1945	Bengal.	1950	West Bengal.
1946	Mysore.	1951	West Bengal.

Inter-University Football Championship

1941	Calcutta.	1947	Madras.
1942	Punjab.	1948	Madras.
1943	Punjab.	1949	..
1944	Punjab.	1950	Calcutta.
1946	Madras.	1951	Nagpur.

HOCKEY

Beighton Cup

1931-32 Cal. Customs; 1933 Jhansi Heoes; 1934 Cal. Rangers; 1935 Cal. Customs; 1936 Bombay Customs; 1937 B. N. Railway (Kharagpur); 1938 Cal. Customs; 1939 B. N. Ry.; 1940 Bhopal Wanderers; 1941 Bhagwant Club (Tricumgarh) and Bhopal Wanderers; 1942 Cal. Rangers; 1943-45 B. N. Ry. (Kharagpur); 1946 Port Commissioners (Cal.); 1947 No game; 1948 United Provinces & Port Commissioners (Calcutta); 1949-50 Tata S. C. (Bombay); 1951 Hindustan Aircraft (Bangalore).

First year's winners—Naval Volunteers 1895-96.

Higest number of winners—Calcutta Customs—12 terms.

Aga Khan Cup

1934 Bombay Customs; 1935 Bombay Customs; 1936 Bombay Customs; 1937 Lahore Y. M. C. A.; 1938 Bhagwant Club (Tricumgarh); 1939 Bhopal Wanderers; 1940 B. B. C. I. Ry.; 1941 Bhagwant Club (Tricumgarh); 1942 No play; 1943 G. I. P. Ry.; 1944 Kamala Club (Kanpore); 1945 Kamala Club (Kanpore); 1946 Kalyanmal Mills (Indore); 1947 Rawalpindi Spartans; 1948 Kirkee United; 1949 East Punjab Police; 1950 Tata Sports; 1951 Tata Sports (Bombay).

National Hockey Championship

(*Started in* 1928)

1928 U. P.; 1930 Railways; 1932 Punjab; 1934 No game; 1936 Bengal; 1938 Bengal; 1940 Bombay; 1942 Delhi; 1944 Bombay; 1945 Bhopal; 1946 Punjab; 1947 Punjab; 1948 Bhopal; 1949-51 East Punjab.

PROVINCIAL BADMINTON CHAMPIONSHIP

1944	Delhi.	1946	Punjab.	1948	No tournament
1945	Punjab.	1947	Bombay.	1949	Bombay.

BILLIARD CHAMPIONS

1941—V. R. Freer (Madura).
1942—V. R. Freer (Madura).
1943-45—*No game.*
1946—C. Hirajee (Calcutta).
1947—C. Hirajee (Calcutta).
1948—V. R. Freer (Madura).
1949—T. A. Selveraj (Bangalore).
1950—Wilson Jones (Bombay).
1951—Wilson Jones (Bombay).

WOMEN'S RECORDS IN INDIA

100 metres run	B. Edward (Bengal)	12·8 s.
Running High Jump	Miss U. Lyons (Punjab)	4 ft. 11¾ in.
Shot put	M. Yates (All. 1941)	31 ft. 10½ in.
Discuss Throw	Miss Gilbert (Bom. 1942)	92 ft. 6 in.
Javelin Throw	N. Duke (Punjab)	91 ft. 8 in.
Broad Jump	Miss Gilbert (Bom.)	15 ft. 5½ in.
Putting the Shot	Miss Gilbert (Bom.)	29 ft. 11 in.
100 metres Breast Stroke	Asha Saha (Cal. 1951)	1 m. 37·6 s.
100 metres Free Style	Miss P. Ballantyne (Bom.)	18·6 s. (1947
100 metres Back Stroke	Dolly Nazir (Bom. 1949)	1 m. 45·7 s.

SOME ALL INDIA SPORTS RECORDS

Track & Field

Hop Step and Jump	H. Rebello (Mysore)	'48	50 ft. 2 in.
Pole Vault	Mushraf Hussain (U.P.)	'48	12 ft. 2½ in.
Hammer throw	Kishon Singh	'51	155 ft. 4½ in.
Discus throw	Makhan Singh	'51	131 ft. 7½ in.
Javelin throw	E. Whither (Punjab)	'33	183 ft. 2⅜ in.
Shot Put	Zahur Ahmed Khan (Punjab) 1940		45 ft. 2 in.
High Jump	Mehenga Singh	'51	6 ft. 3½ in.
Long Jump	Niranjan Singh ,,	'34	23 ft. 10½ in.
100 yards run	R. A. Verneaux (Ben.)	'34	9·7 sec.
200 ,, ,,	E. Whiteside (Punjab)	'36	21·8 sec.
440 ,, ,,	G. P. Bhalla ,,	'34	50·0 sec.
880 ,, ,,	G. P. Bhalla ,,	'34	1 m. 59·2 s.
One Mile	Chand Singh (Patiala)	'38	4 m. 25·6 s.
Three Miles	Raunak Singh ,,	'34	15 m. 3·7 s.
Five Miles	Gujjar Singh (Punjab)	'34	27 m. 10 s.
Six Miles	Raunak Singh (Patiala)	'35	31 m. 33·5 s.
100 metres run	J. Hart (Punjab)	'36	10·6 s.
	Sleem Ullah (Punjab)	'37	10·6 s.
	E. L. Philip (Madras)	'46	10·6 s.
200 Do. do.	Sgn. Gabriel	'51	21·7 s.
400 Do. do.	F. Gantzer (Bengal)	'38	49·8 s.
800 Do. do.	Nika Singh (Patiala)	'50	1 m. 53·8 s.
1,500 ,,	Chand Singh ,,	'44	4 m. 4·2 s.

3,00 metres run ..	Chand Singh „	'44	8 m. 49·9 s.
5,000 „	Raunak Singh „	'36	15 m. 23 s.
10,000 „	Raunak Singh „	'36	32 m. 2·6 s.
15,000 „	C. S. A. Swami (Bom.)	..	58 m. 16·4 s.
20,000 „	C. S. A. Swami „	..	1 h. 16 m. 0 s.
30,000 „	R. G. Michael „	..	2 h. 13 m. 50 s.
Marathon (26m. 385 yds.)	Chhota Singh (Patiala)	..	2 h. 42 m. 33·6 s.
110 metres hurdles ..	J. Vickers (Bombay)	'46	15·2 s.
3,000 M. Steeplechase ..	Nazir Singh (Patiala)	'48	10 m. 1·9 s.
10,000 M. walk ..	Raunak Singh „	'48	54 m. 23·88 s.
50 kilometers walk ..	Bakhtwar Singh „	'44	5 h. 15 m. 8·4 s.
400 meters relay ..	Punjab team	'40	5 h. 15 m. 8·4 s.
1,600 „ „ ..	Bombay team	'50	50 m. 26 s.

FIRST ASIAD, 1951

Held at Delhi on March 4, 1915. The countries participating in the games were—Afghanistan, Burma, Ceylon, Indonesia, Iran, Japan, Nepal, Philippines, Singapur, Thailand and India.

Track and Field

100 metres m. s.

1. L. Pinto (India) 10·8

200 metres

1. L. Pinto (India) 22

400 metres

1. E. Okano (Japan) 50·7

800 metres

1. Ranjit Singh (Ind.) 1 59·3

1,500 metres

1. Nikka Singh (India) 4 41·1

3,000 m. Steeple Chase

1. S. Takahashi (Jap.) 9 30·4

5,000 metres

1. Baghban Bashi (Iran) 15 54·2

1,000 metres

1. Soichi Tamoi (Jap.) 33 49·3

10,000 *m. Walk*

1. Mahabir Singh (Ind.) 52 31·4

50,000 *m. Walk*

1. Bakhtawar Singh *hrs.* (India) 5 44 7·4

Marathon h. m. s.

1. Chota Singh (India) 2 42 58·6

110 m. Hurdles

1. Ng. Liang Chiang (Sing.) 15·2

400 m. Hurdles

1. E. Okano (Japan) 54·2

400 m. Relay

1. Japan

1,600 m. Relay

1. India

High Jump *ft. in.*

1. A. Franco (Philippines) 6 4¼

Broad Jump

1. M. Tajima (Japan) 23 5½

Hop, Step & Jump

1. Y. Iimuro (Japan) 49 9¼

Pole Vault

1. B. Sawada (Japan) 13 6

Javlin Throw

1. H. Nagayu (Japan) 209 10

Discus throw

1. Makhan Singh (India) 130 10¾

Putting the Weight ft. in.

1. Madan Lal (India) 45 2½

HammerThrow

1. F. Kamamota (Japan) 152 11¾

Swimming

100 m. Free Style

1. Sachin Nag *m. s.* (India) 1 4·7

100 m. Back Stroke

1. A. Salamet (Philippines 1 16·3

200 m. Breast

1. T. Cayco (Philippines) 2 54·4

400 m. Free Style

1. N. Chwee Kok (Singapur) 5 13·8

800 m. Free Style

1. N. Chwee Kok (Singapur) 11 2·2

1,500 m. Free Style

1. N. Shwee Kok (Singapur) 21 43·6

Football

1. India

Basketball

1. Philippines (8 hrs.)

CRICKET

Summary of Test Matches

England v. *South Africa (Total 91)*

First played 1888-89; England won 37; South Africans won 13; 29 matches drawn.

England v. *New Zealand (Total 19)*

First played 1928. England won 9; West Indies won 8; 8 matches drawn.

England v. *New Zealand (Total 19)*

First played 1929-30; England won 4; 15 matches drawn.

England v. *India (Total 10)*

First played 1932; England won 6; 4 matches drawn.

England v. *Australia (Total 158)*

First played 1876-77; England won 56; Australia won 68 and 34 matches drawn.

Test Cricket Records

Highest Match Aggregates—1981 runs (35 wickets)—England vs. South Africa at Durban, 1939.

Lowest Match Aggregates—234 run (30 wickets)—Australia vs. South Africa, Melbourne, 1932.

Highest totals—903 (7 wkts. dec.) for England vs. Australia, Oval, 1938.

Lowest totals—30 for South Africa vs. England, 1895 and 1924.

Highest Aggregate by a side in a match—1121 (19 wkts.)—England *vs.* West Indies, Kingston, 1930.

Lowest Aggregate by a side in a match—81 (20 kts.) South Africa *vs.* Australia at Melbourne, 1932.

Most Hundreds—29, D. G. Bradman (Australia).

Highest Individual Innings—364 runs, L. Hutton (England) *vs.* Australia, Oval 1938.

Most hundreds in a test match—Seven, England *vs.* Australia at Nottingham 1938 (Barnett 126, Paynter 216*, L. Hutton 100, D. Compton 102 (Eng.) —S. McCabbe 232, W. Brown 133, D. G. Bradman 144* (Australia).

Most wickets (Bowling)—216 for 37 tests—C. V. Grimmett (Australia).

Hundreds in consecutive innings—Five by Everton Weeks.
141 (*vs.* England, Kingston 1947-48).
128 (*vs.* India, Delhi 1948-49).
194 (*vs.* India, Bombay 1948-49).
162 & 101 (*vs.* India, Calcutta 1948-49).

Longest Test Match—South Africa *v.* M. C. C. (1939), for 10 days.

Record Individual Scores—First-Class Matches

*452 Bradman	1930	383 Gregory	1906
*443 B. B. Nimbalkar	1948-49	369 Bradman	1935-36
437 Ponsford	1928	368 Hutton	1938
429 Ponsford	1923	*365 Hill	1900
424 A. C. MacLaren	1895	364 Hutton	1938
345 McCartney	1895	*357 Abel	1899

---

* Not out.

352 Ponsford	1927
McCartney	1921
*344 Headley	1932
344 Grace	1876
*343 Perrin	1904
341 Hirst	1905
340 Bradman	1929
338 Read	1888
338 Blunt	1932
*336 Hammond	1933
336 Ponsford	1928
333 Bradman	1930
333 Duleepsinghji	1930
325 Sandham	1930
321 Murdock	1882

* Not out.

World Cricket Records—First Class

Highest Totals (1st class)—1,107 Victoria v. New South Wales, (Australia) 1926-27.

Highest Individual Score—452 (not out) D. G. Bradman, 1929-30.

First Wicket Partnership—555 Holmes and Sutcliffe, Yorkshire *vs.* Essex, 1932.

Second Wicket Partnership—455 by B. B. Nimbalkar and K. V. Bhandarkar, Maharashtra *v.* Western India States 1948-49.

Third Wicket Partnership—475 by Ponsford (21 not out) and McCabe (192) against M.C.C., 1934.

Fourth Wicket Partnership—577 runs, V. S. Hazare (288) and Gul Mahomed (319), Baroda vs. Holkar, 1946-47.

Aggregate—J. B. Hobbs—61,221; W. G. Grace—54,896.

Highest Aggregate—Bombay 651 and 714 for 6 dec. *v.* Maharashtra, 407,604. Total 2,376 (38 wickets).

Highest Centuries in one innings—Six individual centuries by Holkar against Mysore in Ranji Trophy, 1946.

MEN'S WORLD TRACK & FIELD RECORDS

Running

100 yards	M. Patton (U.S.A.)	9·3 s. (1948)
220 yards	Mel Patton (U.S.A.)	20·2 s. (1949)
880 yards	M. Whitfield (U.S.A.)	49·2 s. (1950)
One miles	G. Haegg (Sweden)	4 m. 1·4 s. (1945)
Two miles	G. Haegg (Sweden)	8 m. 42·8 s. (1944)
	P. Nurmi (Finland)	24 m. 61 s.
Six miles	V. Heino (Finland)	28 m. 38·8 s. (1949)
Ten miles	V. Heino (Finland)	49 m. 22·2 s. (1946)
15 miles	Mikko Hietanen (Finland)	1 h. 17 m. 28·6 s. (1948)
26 m. 385 yds.	K. Son (Japan)	2 h. 29 m. 19·2 s. (1936)
100 metres	J. Owens (U.S.A.) L. La Bech (Panama) H. Davis (U.S.A.)	10·2 s. (1936) 10·2 s. (1948) 10·2 s. (1941)
200 "	Mel Patton (U.S.A.)	20·2 s. (1949)
400 "	V. G. Rhoden (U.S.A.)	45·8 s. (1950)
800 "	R. Harbig (Germany)	1 m. 46·6 s. (1939)
1,000 "	M. Hansenne (France)	2 m. 21·4 s. (1948)
1,500 "	L. Strand (Sweden)	3 m. 43 s. (1947)
2,000 "	G. Reiff (Belgium)	5 m. 7 s. (1948)
3,000 "	G. Reiff (Belgium)	7 m. 58·8 s. (1949)
5,000 "	G. Haegg (Sweden)	13 m. 58·2 s. (1942)
10,000 "	E. Zatopex (C.slovakia	29 m. 21·2 s. (1949)
20,000 "	A. Csaplar (Hungary)	1 h. 3 m. 1·2 s. (1941)
25,000 "	Heitnan (Finland)	1 h. 20 m. 14 s. (1948)
30,000 "	F. K. Vanin (Russia)	1 h. 39 m. 14·6 (1949)

Walking

1 mile	P. Bernhardt (Latvia)	21 m. 1/5 s. (1936)
2 miles	W. Hardmo (Sweden)	13 m. (1944)
10 „	Mikaelsson (Sweden)	1 h. 10 m. 55 s. (1945)
220 „	H. Olsson (Sweden)	2 h. 41 m. 7 s. (1943)
10,000 metres	W. Hardmo (Sweden)	42 m. 39·6 s. (1945)
30,000 „	H. Olsson (Sweden)	2 h. 28 m. 57/4 s. (1943)

Hurdles (10 Hurdles)

120 yds. (3 ft. 6 in.)	Dick Attlesey (U.S.A.)	13·5 s. (1950)
440 yds. (3 ft. hds.)	A. Filiput (Italy)	51·9 s. (1950)

Jumping

Broad Jump	J. Owens (U.S.A.)	26 ft. 8¼ in. (1935)
High Jump	L. Steers (U.S.A.)	6 ft. 11 in. (1941)
Hop Step and Jump	N. Tajima (Japan)	52 ft. 5⅝ in. (1936)
Pole Vault	C. Warmerdam (U.S.A.)	15 ft. 7¾ in. (1942)

Throwing

Discuss	F. Gordien (U.S.A.).	186 ft. 11 in. (1949)
Javelin	Y. Nikkanen (Finland)	193 ft. 6¾ in. (1938)
Hammer Throw	Imry Nemeth (Hungary)	195 ft. 5¼ s. (1949)

Decathlon

8,042 points .. R. B. Mathias (U.S.A.) 1950

Hop, Step and Jump

17 metres (52 ft. and 5⅞ metres) .. A. F. DeSilva (Brazil) 1950

WORLD'S SWIMMING RECORDS (Men)

Free Style—		
100 yds.	Alan Ford (U.S.A., 1944)	49·7 s.
100 metres	Alan Ford (U.S.A., 1948)	55·4 s.
200 metres	Alex. Jany (France, 1946)	2 m. 5·4 s.
1 mile	K. Nakama (U.S.A., 1942)	20 m. 29 s.
Breast Stroke—		
100 yds.	Keith Carter (U.S.A., 1949)	58·5 s.
100 metres	Keith Carter (U.S.A., 1949)	1 m. 7·3 s.
200 yds.	Jaseph Verdeur (U.S.A., 1948)	2 m. 14·7 s.
400 metres	Bob Bonte (Holland, 1948)	5 m. 40·2 s.
500 metres	Do. Do. Do.	7 m. 10·6 s.
Back Stroke—		
100 yds.	A. Kiefer (U.S.A., 1944)	56·8 s.
100 metres	Allan Stack (U.S.A., 1949)	1 m. 40 s.

WOMAN'S WORLD TRACK, FIELD & SWIMMING RECORDS

100 yds. run	F. B. Koen (Holland)	10·8 secs. (1944)
220 yds.	F. B. Koen (Holland)	24·2 s. (1950)
100 metres run	H. Stephens (U.S.A.)	11·5 s. (1936)
Do. do.	F. B. Kon (Holland)	11·55 (1938)
800 metres	E. M. Vasiljova (U.S.S.R.)	2 m. 138 (1950)
Broad Jump	F. B. Koen (Holland)	20 ft. 6 in. (1945)
Running High Jump	F. B. Koen (Holland)	5 ft. 7¼ in. (1943)
Discus Throw	Nina Dumbadzee (Russia)	175 ft. (1948)
Javelin Throw	N. V. Smirnitskaja (Russia)	175 ft. 2¾ in. (1949)

Swimming (free style)		
100 yds. ..	G. Andersen (Denmark) ..	58·2 s. (1949)
100 metres ..	W. Denouden (Holland) ..	1 m. 4·6 s. (1936)
Swimming (breast stroke)		
100 yds. ..	N. Van Vliet (Netherlands)	1 m. 9·2 s. (1947)
100 metres ..	Gisele Vallerey (France)	1 m. 17·4 s. (1950)
Swimming (back stroke)		
100 yds. ..	Cor. Kint (Netherlands) ..	1 m. 5·1 s. (1939)
100 metres ..	Cor. Kint (Netherlands) ..	1 m. 10·9 s. (1939)

DAVIS CUP

1932 France
1933 Britain
1934 Britain
1935 Britain
1936 Britain
1937 U. S.
1938 U. S.
1939 Australia
1940-45 No game.
1946 U. S.
1947 U. S.
1948 U. S.
1949 U. S.
1950 Australia

WIGHTMAN CUP (WOMEN'S TROPHY)

(*England* v. *U.S.A. started in* 1923)

1934-39 U. S. A.
1941-45 No matches
1946-50 U. S. A.
1951 U. S. A.

MILE RUNNERS

1874 W. Slade (Eng.) 4 m. 24·5 s.
1882 W. George (Eng.) 4 m. 21·4 s.
1923 P. Nurmi (Swed.) 4 m. 10·4 s.
1931 J. Ladoumergue (France) .. 4 m. 9·2 s.
1933 J. Lovelock (U.S.) 4 m. 7·6 s.
1934 J. Cunningham (U.S.) .. 4 m. 6·8 s.
1935 Woodersoon (Eng.) 4 m. 6·4 s.
1942 G. Haegg (Swed.) 4 m. 4·6 s.
1943 Anderson (Swed.) 4 m. 1·6 s.
1945 G. Haegg (Swed.) 4 m. 1·4 s.

WORLD CHESS CHAMPIONS

1851-58—Adolph Anderson (Ger.)
1858-62—Paul Morphy (U.S.A.)
1862-66—Adolph Anderson (Ger.)
1866-94—Wilhelm Steinitz (Aust.)
1894-1921—Dr. Lasker (Germany)
1921-27—J. R. Capablanca (Cuba)
1927-35—A. A. Alekhine (Russia)
1935-37—Dr. M. Euwe (Holland)
1937-46—A. Alekhine (Russia)
1946-47—*Vacant.*
1948-51—M. Botwinnik (Russia)

BOXING CHAMPIONS

Heavy weight (1813 lbs.) Joe Walcott (U.S.)
Light-Heavy Weight (175 lbs.)—Joe Maxim.
Middle-Weight (160 lbs.)—Sugar Ray Robinson (U.S.)
Welter Weight (147 lbs.)—Kid Gavilan (Cuba).
Light Weight (135 lbs.)—James Carter (U.S.A.)
Feather Weight (126 lbs.—Sandy Saddler (U.S.A.)
Bantam Weight (118 lbs.)—Vic Toweel (S. Africa)
Fly Weight (112 lbs.)—Dado Marino (Honolulu)

MODERN HEAVY-WEIGHT CHAMPIONS

John L. Sulivan (1882-92)
James J. Corbett (1892-97)
Robet Fitzsimons (1897-99)
James J. Jeffries (1899-1906)
Tommy Burns (1906-08)
Jack Johnson (1908-15)
Jess Willard (1915-18)
Jack Dempsy (1919-26)
Gene Tunney (1926-28)
Max Schmeling (1930-31)
Jack Sharkey (1932)
Primo Carnera (1933)
Max Baer (1934)
James J. Braddock (1935-36)
Joe Louis (1937-49)
Ezzard Charles (1949)
Joe Walcott (1951)

WORLD WRESTLING CHAMPIONSHIP, 1951

Fly weight—Ali Yusel (Turkey)
Bantam weight—Kasun Amar (do.)
Feather weight—N. Jafar (do.)
Light weight—O. Anjbaberg (Sweden)
Wetter weight—Sail Atik (Turkey)
Middle weight—H. Zafer (Turkey)
Light-heavy weight—Yazar Dosu (Turkey)
Heavy weight—B. Antonson (Sweden)

WORLD TABLE TENNIS

(*Swaythling Cup*)

1926-27—1930-31	Hungary
1931-32 ..	Czechoslovakia
1932-33—1934-35	Hungary
1936-37 ..	U.S.A.
1937-38 ..	Hungary
1938-39 ..	Czechoslovakia
1939-46 ..	*No competition*
1946-47 ..	Czechoslovakia
1947-48 ..	do.
1948-49 ..	Hungary
1949-50 ..	Czechoslovakia
1950-11 ..	Do.

CORBILLON CUP

(*For Women's Team Event*)

1949-50 and 1950-51—Rumania

WORLD TABLE TENNIS CHAMPIONSHIP

Singles

1937-38—R. Bergmann (*Austria*)
1938-39—B. Vana (*Czechoslovakia*)
1939-40—R. Bergmann (*Austria*)
1940-46—*No competition.*
1946-47—B. Vana (*Czechoslovakia*)
1947-48—R. Bergmann (*England*)
1948-49—J. Leach (*England*)
1949-50—R. Bergmann (*England*)
1950-51—J. Leach (*England*)

WORLD FOOTBALL CUP

(*Played every fourth year—started in 1930*)

1930—Uruguay
1934—Italy
1938—Italy
1950—Uruguay

THOMAS CUP

(*International Badminton Championship*)

1949—Malaya

OLYMPIC RECORDS 1896—1948

100 Metres Run

1936 Jesse Owens, U.S.A. .. 10·2s.

200 Metres Run

1936 Jesse Owens, U.S.A. .. 20·7s.

Marathon

Broad Jump

1948 W. Steele, U.S.A. 25ft. 8 in.

Hop Step and Jump

1936 N. Tajima, Japan 52 ft. 5⅞ in

Discus Throw

1936 K. Son, Japan 2h. 29m. 19·2s.

110 Metres Hurdles

1948 William Porter, U.S.A. 13·9s.

400 Metres Hurdles

1948 Roy Cochran, U.S.A. 51·1s.

Pole Vault

1936 E. Meadows, U.S.A. 14ft. 3¼ i.n.

Running High Jump

1936 C. Johnson, U.S.A. 6ft. $7^{15}/_{16}$ in.

1948 A. Consolini, Italy 173 ft. 2 in.

Javelin Throw

1932 Matti Jarvinen, Finland .. 238 ft. 7 in.

Decathelon

1936 Glen Morris (U.S.A.) 7,900 pts.

16 lb. Shot-put

1948 W. Thompson, U.S.A. .. 56 ft. 2 in.

16 lb. Hammer Throw

1936 Karl Hein, Ger. .. 185 ft. 4 in.

SOME NOTABLE RECORDS

World Motor-boat Record—Stanley S. Sayres (U.S.A.)—160·3235 m.p.h. 26 June, 1950. *Previous record*—Sir Malcolm Campbell (Eng.)—141·74 m.p.h., 19th August, 1939.

World Air Speed Record—670·9 m.p.h., by Major Richard L. Johnson (U.S.A.), Sept. 15, 1948.

Motor Cycle Record, One mile—Earnest Henne (Hungary) with 171·674 m.p.h.: *One hour*—Taruffa (Italy)—127·537 m.p.h.

Under Sea Record—Mr. Otis Barton on August 16, 1949 descended into the Pacific 30 miles off the California coast in his benthoscope to the record depth of 4,500 ft. beating the record of Prof. Beebe, who descended to the depth of 3,028 ft. in 1934.

Motor Speed Record—*Large Car: One mile*—John Cobb (England) 394·196 m.p.h. (1947); *24 hours*—Eyston (England), 3578·3 miles; *Small car:* Kohlrausch—140·7 miles m.p.h.

Ice Skating (speed)

500 metres—H. Engnestangen (Norway): 41·8s. (1938).

10,000 metres—H. Andersen (Norway): 16:57·4 (1949).

Figure Skating

Men: 1949 Richar Button (U.S.) *Women:* 1949 Alena Kzanova (Czechoslovakia).

MISCELLANEOUS RECORDS

Golf Ball—176 ft. per second.

Tennis Ball—220 ft. in one second by W. T. Tilden II in 1931.

Ice Skating—100 yds. in 92·5 seconds in 1931.

Rifle—2,880 miles per hour (*i.e.*, 4,100 ft. per second).

Sound—780 miles per hour.

Leaping—Frog: 19 ft. in 1937 in America in frog contest with 100 frogs.
Horse: 37 ft. by steeple chaser, Chandler, 1947 in England (Average is 23 and 27 ft.).

Diving—Jack Brown, April 28, 1945 attained a depth of 550 ft.
Diving, highest—205 ft. 9 in. by Alex. Wickham (Solomon Islands).

Mountain Climbing—28,126 ft.—highest known ascent on Mt. Everest by Lt. Col. E. F. Norton, 1929.

Rope Skipping—18,463 turns (no break) in 1 hour 41 minutes by Tom Morris (Australia).

Cricket Ball Throw—422 ft. by R. Parcival, Durham, England, 1884.

AVIATION RECORDS

Aeroplane Altitude Records

Height (feet)	*Year.*	*Aviator*
41,795	1929	W. Neuenhofen (Germany)
43,166	1930	A. Soucek (U.S.A.)
43,976	1932	C. F. Unwins (England)
47,352	1934	R. Donati (Italy)
47,806	1935	V. Kokkinaki (U.S.S.R.)
49,994	1936	S. R. D. Swain (England)
53,937	1937	Fl. Lt. Adam (England)
56,046	1938	Mario Pazi (Italy)
59,492	1948	J. Cunningham (England)

Endurance Flight Record

Hr.	*Min.*	*Year.*	*Aviator.*
150	40	1929	Carl Spatz (U.S.A.)
172	32	1929	Robbins & Kelly (U.S.A.)
246	43	1929	Mendell & Reinhart (U.S.A.)
553	41	1930	J. & K. Hunter (U.S.A.)
647	28	1930	Jackson & O'Brine (U.S.A.)
653	34	1935	Al & Fred Key (U.S.A.)
1,008	1	1949	W. Barris & R. Riedel (U.S.A.)

Speed Records—Land planes

m.p.h.	*Year*	*Aviator*
c30	1903	O. Wright (U.S.A.)
120·9	1919	Alcock & Brown (Eng.)
294·38	1932	J. Doolittle (U.S.A.)
304·38	1933	J. Wedell (U.S.A.)
469·22	1939	F. Wendel (Ger.)
606	1945	H. J. Wilson (Eng.)
650	1947	Marion Carl (U.S.)
670·9	1948	R. L. Johnson (U.S.A.)

Speed Records—Sea planes

m.p.h.	*Year*	*Aviator*
340·08	1931	J. H. Boothman (Eng.)
406·99	1931	G. H. Stainforth (Eng.)
440·68	1934	F. Agello (Italy)

Non-stop Record

Year.	*Distance (miles)*	*Aviator.*	*Flown.*
1919	1,960	Alcock & Brown (Eng.)	New Foundland to Iceland.
1923	2,560	Macready & Kelly (U.S.A.)	N. Y. to California.
1927	3,610	C. L. Lindburgh (U.S.A.)	New York to Paris.
1927	3,905	C. Chamberlain & C. Levine (U.S.A.)	New York to Germany.
1928	4,466	A. Ferrarin & C. P. Prete (Italy)	Rome to Touros (Brazil).
1930	4,912	D. Coste & M. Bellonte (Fr.)	France to Manchuria.
1933	5,411	Gayford & Nicholetts (Eng.)	Cornwall to S. Africa.

1933	5,657	P. Codes & M. Rossi (France)	New York to Syria.
1945	8,198	Irvine & Stanley (U.S.A.)	Guam to Washington D. C.
1946	11,236	Comdr. Davies & U. S. Navy Crew (U.S.A.)	Australia to Colombo.

Aeroplanes

First Aeraplane Flight—World's first controlled flight in power-driven aeroplane by Orville Wright, 284 yds. on December 17, 1903.

Greatest Speed—Major Richard L. Johnson (U.S.A.)—670·9 m.p.h. on Sept. 15, 1948.

First polar Flight—By Byard (May 8-9, 1926).

First Solo Polar Flight—over North Pole by Capt. Charles F. Blair (U.S.A.), May 29, 1951.

Around the World—U. S. Air Force B-50 bomber '*Lucky Lady II*' non-stop refuelled in the air) 23,452 miles in 94 hours.

Distance—11,235 miles by T. D. Davis, E. P. Ranklin, W. S. Reid and R. A. Tabeling (U.S.A.) on Sept. 29—Oct. 1, 1946.

Endurance Flight Record—Bob Wordehouse and W. Jongeward (America) new for 1,114 hours and 18 minutes *i.e.* over 46 days (1949).

First Non-stop Trans-Atlantic Flight—By Captain Alcock and Lt. Brown (June 15-16, 1919) in hrs. 12 min.

First Solo Trans-Atlantic Flight—By Lindburgh (May 20-21, 1927) in 36 hrs. 39 m.

Seaplanes

Distance Air Line—Capt. Bennet and F. O. Harvey (Great Britain) 6-8 October, 1938; Dundee to Port Nolloth (South Africa)—5,997·462 miles (965·001 kilometres).

Distance Over Closed Circuit—M. Stoppani and C. Tonini: Italy, 27-28 May, 1937—3,231·123 miles (5,200 kilometres).

Greatest Speed—Francesco Agello, Italy, 23rd October, 1934—440·681 miles per hour.

Solo Flight around the World—Capt. Odom (America) set world record of solo flight round the World in 73 hrs. 6 mins. (19,645 miles) in 1947.

Balloons

Duration—H. Kaulen, 13-17th December, 1913—87 hrs.

Altitude—Capt. Anderson and Capt. Stevens (U.S.A.)—72,395 feet (over 13½ miles) on Nov. 11, 1935.

Air Ship

Long Distance—Germany to Tokio, 15-19th August, 1929, Graf Zeppelin—7,500 miles.

Gliders

Duration—Eric Oessler (France) in June, 18-20 1942—38 hrs. 21 m. 24 s.

Distance Air Line—O. Klepikova (U.S.S.R.)—July 2, 1939—465·532 miles.

Altitude—Lt. Per Axel Person (Sweden) on July 12, 1947—26,410·708 ft.

Parachute

Descent—Rene Michenaud (1932, France) jumped from an aeroplane at an altitude of 25,590 ft. in France.

Delayed Parachute jump—Vlentina Seliverstova (Russia) jumped from 23,295 ft. and did not open her parachute until she had fallen 20,777 ft. (1951).

Jet Planes

New Speed & Altitude Records—On July 3, 1951 U. S. Navy announced that Dauglas Sky Rocket had exceeded all airplane speed and altitude records—No details given for security reasons, but American press stated that speed was probably over 1,000 m.p.h. and its altitude 12 to 13 miles. Accepted speed record was 670·98 m.p.h. set up by U.S. Sabre Jet fighter on Sept. 18, 1948. Previous world altitude record was British Vampire Jet fighter which attained a height of 65,446 (11¼m.) in 1948.

Women's Flight Records

Distanae Air Line—V. Grisodoubova and P. Ossipenko, U.S.S.R., September 24-25, 1938—3,671·432 miles.

Altitude—Mile Hilz (France)—46,948·725 ft. on June 23, 1936.

Speed—J. Cochran (U.S.A.)—412·002 m.p.h. on Dec. 17, 1947.

First Woman Trans-Atlantic Solo Flight—Mrs. Amelia Earhart Putnam (U.S.A.), approximately in 13 hrs. 30 mins., on May 20-21, 1932.

Helicopter

Distance Airline—Maj. Caschman and Maj. Zins (U.S.A.)—743·6 miles on May 22, 1946.

Altitude—Capt. H. D. Gaddis (U.S.A.)—21,220 ft. on May 21, 1949.

Distance, closed circuit—Maj. D. H. Jenson and Maj. W. C. Dodds (U.S.A.)—621·369 miles, Nov. 14, 1946.

Maximum Speed—H. E. Thomson (U.S.A.)—129·552 m.p.h. Apl. 27, 1949.

Speed, close circuit—Maj. D. H. Jensen and Maj. W. C. Dodds (U.S.A.)—66·642 m.p.h. on Nov. 14, 1946.

INDIAN INDUSTRY

Industrial Control –Down to 1918, the attitude of Government towards industry was one of *laisses faire* which was in line with the economic policy then prevailing viz., the industrial progress was best achieved by unregulated private enterprise. This doctrine of *laissez faire* underwent some modification after the World War I through the adoption of discriminating protection and acceptance of the principle underlying the recommendation of the first Fiscal Commission, that Government should play an active part in the industrial development of the country. Towards the end of World War II, it became evident that the State had to play active role in the industrial development of the country. It was under these circumstances that the Government of India announced their Industrial Policy of April 1945.

Industrial Policy Statements—The statement of 1945 envisaged Government control of 20 major industries and the nationalisation of important industries like aircraft, automobiles, chemicals, iron and steel, prime movers, transport vehicles, electrical machinery machine tools, electro-chemical and non-ferrous metals, provided adequate private capital was not forthcoming. The political developments of the following years made it impossible for much progress to be made along the lines proposed by the Statement.

In the year 1947, the economic conditions of the country was alarming. To assist Government in arriving at decisions for an immediate increase in production and also to exchange views with various interests connected with industry on the large problems of policy and planning, a conference of prominent industrialists and representatives of labour, trade and State Governments, was called towards the end of 1947.

Resolution on Industrial Policy—This conference marked the beginning of Government's present Industrial Policy. Most of the recommendations made by the Conference were accepted by Government, in their Resolution of April 6, 1948, outlining their Industrial Policy. The salient features of the Policy are:—

(*i*) That the manufacture of arms and ammunition, the production and control of atomic energy, the ownership and management of railway transport should be the exclusive monopoly of Central Government.

(*ii*) That the State—Central or State Governments—will be responsible for the establishment of new undertakings in the following fields:—

(*a*) Coal.

(*b*) Iron and Steel.

(*c*) Aircraft manufacture.

(*d*) Shipbuilding.

(*e*) Manufacture of telephone, telegraph and wireless apparatus, excluding radio receiving sets and

(*f*) Mineral oils.

Existing undertakings will be allowed to develop for a period of ten years and Government will give all assistance for such development. At the end of the period their position will be reviewed.

(*iii*) Control by the State over the generation and distribution of electric power will continue.

(*iv*) Rest of the industries will normally be open to private enterprise with varying degrees of control over location.

(*v*) Central Government would investigate how far and in what manner cottage and small-scale industries could be co-ordinated and integrated with large scale industries. Government have established a Cottage Industries Board for the purpose.

Under the terms of the Resolution, Government set up a *Central Advisory Council of Industries* with representatives of Industry, Labour, Trade, State Governments and members of Legislature to advise Government generally on industrial policy, on the allocation of raw materials in scarce supply and to review periodically production of major industries. The Council has since been replaced by a High Level *Development Committee on Industries.*

As the powers of the Central Legislature were not adequate for the purpose of giving adequate shape to the intentions underlying Government's policy, steps were taken to amend the Government of India Act, 1935, to confer necessary powers on the Central Government. This has been the first step in the direction of assuming powers for the formulation and execution of a co-ordinated plan for the industrial development of the country.

Participation of Foreign Capital—It has been found necessary to associate foreign capital in Indian industries not only because our national saving are not enough for the rapid development of India on the scale we wish, but also because in many cases scientific, technical and industrial knowledge and capital equipment can be best secured along with foreign capital. Government of India's policy in respect of participation of foreign capital was announced in April 1948 when it was made clear that we would welcome it on terms and conditions that were mutually advantageous. The important conditions mentioned therein were that the major interest in ownership and effective control should, as far as possible, be in Indian hands. In all cases the training of suitable Indian personnel for the purpose of eventually replacing foreign experts should be insisted upon. Compensation should be paid on a fair and equitable basis if foreign enterprises were compulsorily acquired.

In his statement in the Parliament on April 6, 1949, the Hon'ble the Prime Minister further clarified the Government's policy with regard to foreign participation. He stated, that, in the first place, Government would expect all undertakings, Indian or foreign, to conform to the general requirements of their Industrial Policy. As regards existing foreign interests, Government do not intend to place any restrictions or impose any conditions which are not applicable to similar Indian enterprise. Government would also so frame their policy as to enable further foreign capital to be invested in India on terms and conditions that are mutually advantageous. Secondly, foreign interests would be permitted to earn .profits, subject to regulations common to all. No difficulty is foreseen in continuing the existing facilities for remittance of profits, and Government have no intention to place any restriction on withdrawal of foreign capital investment, but remittance facilities would naturally depend on foreign exchange considerations. If, however, any foreign concerns came to be compulsorily acquired, Government would provide reasonable facilities for the remittance of proceeds. Thirdly, if and when foreign enterprises were compulsorily acquired, compensation would be paid on a fair and equitable basis.

Industries Development and Control Act—A Act for the development and regulation of specified industries known as Industries (Development and Control) Act was passed in 1951 by Parliament. One of the most important features of the Act is the provision for the licensing of new undertakings and substantial expansion of existing ones and also power of direction and control of industries by the Central Government.

The Act is the principal instrument of planing and regulation of important industries, the activities of which affect the country as a whole and the development of which must be governed by economic considerations of all-India import. The Act confers on Government power to make rules for the registration of existing undertakings, for regulating the production and the development of these industries and for consultation with State Governments on these matters.

The Act lays stress on development of industries and provides for an effective machinery for the purpose. Regulation comes in as a corollary to development. The introduction of *Development Councils* is the most effective feature of the Act. These Councils will keep in close touch with the industries and try to help them in all possible ways. Issue of directions will come in only when the Development Councils will fail in their method of persuation. Control of management will come when directions fail. There is a provision for the establishment of *Central Advisory Council* representing all industries. This Council has to be consulted wherever any direction is to be issued or control is to be exercised on the management. *The Development Councils* will arrange for better marketing of goods, will assist in the distribution of controlled materials, and will promote arrangements for obtaining materials.

Planning and State Control —The Planning Commission, in its draft Five Year Plan, has provided for the industrial development of the country on a co-ordinated basis with state control and direction wherever necessary. The Commission envisages a centrally directed economy in which the State plays an active role and there is close co-ordination between the public and the private sectors. In a planned economy the Commission states, "private enterprise has to visualise for itself a new role and accept, in the larger interest of the country, a new code of discipline. Private enterprise, like any other institution, will endure and justify itself only to the extent to which it proves to be an agent for promoting the public good." As the bulk of the resources which can be mobilised during the period of the Plan will be employed in the development of agriculture, irrigation and power, and community services, it will not be possible for the State to make large investments directly in industry. Such investment as can be made should be devoted, according to the Commission, to new lines urgently needed, and to expansion of enterprises already under public ownership and management. The private sector will thus continue to play an important part in production as well as in distribution. The State will control and direct investment, regulate foreign trade, conserve foreign exchange and safeguard the standards of essential consumption in the community . While plans for the private sector have to be worked out in consultation with the representatives of the different industries, planning implies the acceptance by all the overall objectives and standards of performance set by the community; for, the economy is a single whole, and the plans of the public sector and the private sector must produce a coherent picture.

Government Organisations—The Government have set up the following main organisations for the development of industries in India—

Cottage Industries Board—Cottage Industries Board which was set up in accordance with the recommendation of the Industries Conference of December, 1947, was reconstituted in 1950. The Board has the following functions:—

(1) To advise and assist Government on the organisation and development of cottage and small-scale industries and function as an executive body exercising executive functions through the Executive Committee;

(2) To examine and advise how cottage and small-scale industries can be co-ordinated with large-scale industries;

(3) To examine the schemes of the State Governments for the promotion of cottage and small-scale industries and to assist in co-ordinating them;

(4) To advise the Government on the marketing of the products of cottage and small-scale industries in India and abroad.

A Central Cottage Industries Emporium was opened at Delhi in April 1949.

Council of Scientific and Industrial Research—This Council formed under the Central Government auspices, is the first organised effort in India to popularise and put into effective use the application of science to industry. It has under it 24 expert committees which survey the scientific needs of the various industries from time to time and suggest the means of developing them. It has established the 11 national research organisations. A committee, known as the Industrial Liaison Committee, functioning under its auspices is required to keep in constant touch with the industries on matters relating to the utilisation of the results of researches carried under its auspices.

Silk Board was constituted in May 1949 for the development of sericulture in India. The Government is encouraging the industry by means of grants to States, establishment and development of cocoon markets, importation of silk from Japan, cultivation and production of mulberry.

Chain of National Laboratories where research on the application of scientifiic knowledge to industrial progress is carried on have been established.

Government have also established *Handloom Development Board* in 1950 with a grant of 1,000,000 for distribution in different States.

Indian Standard Institution—Enrolled as a member of the International Standard Institution, Geneva, this semi-official body has been set up by the Government of India under its control with the object of improving the standards of Indian products to bring them up to quality levels competitive with foreign products and to standardise the quality of Indian goods for consumption at home and abroad. With its textiles, engineering and chemical wings among its five sections, such an institution has of late been keenly required owing to the fall in the marketability of Indian products in the absence of standard specifications and quality control.

Industrial Finance Corporation—This Corporation established under an Act passed in 1948 is required to solve the industrial needs of medium and long-term capital, a long-felt need as such credit cannot normally be supplied by ordinary commercial banks. Owned jointly by the Government, the Reserve Bank of India, the Scheduled Banks, Insurance Companies and other institutional investors, this Corporation is authorised to make loans and advances to industrial concerns and guarantee loans raised by them in the market, all repayable within a period of 25 years. To finance these needs, the Corporation has a share-capital of Rs. 10 crores divided into 20,000 fully paid-up shares and has authority to issue bonds and debentures upto 5 times its share-capital.

Government Industrial Enterprises—In fulfilment of the Government's industrial policy as also due to lack of sufficient private enterprise in many fields, the Government of India have taken in hand some big and small industries and are contemplating some more. Of these, however, those that are contemplated with the assistance of capital equipments from dollar and hard currency areas are expected to be delayed by devaluation of the rupee in relation to the dollar.

As to State management of industries, direct government management was an obvious necessity. After due consideration of various methods, the government have settled the pattern of management. The Government decided that private limited companies under Indian Companies Act, with Board of Director should be constituted for management of these companies. In addition of government industrial enterprises the government are also controlling some industries such as coal and steel which are showing steady improvement as regards production.

1. *Fertilizer Industry.*—The factory, at Sindri has started producing ammonium sulphate which will enrich the Indian soil with bigger and better food and other crops. The cost of construction of Sindri factory is 23 crores. Sindri has a production target of 1,000 tons of ammonium sulphate daily or about 350,000 tons a year. Sindri is situated on the river Damodar, 14 miles down stream from Dhanbad in Bihar. In the

process of manufacture of 1,000 tons of ammonium sulphate per day, about 900 tons of calcium carbonate sludge will be thrown up as a by-product. Plans are under the consideration of the Government of India for utilising this by-product as a raw material for a cement factory with an installed capacity of 300 tons per day. The Silo constructed for the storage of the finished product is one of the largest monolithic reinforced concrete buildings in the world.

2. *Aircraft Industry.*—The Hindusthan Aircraft Factory at Bangalore, in which the Government of India owns a two-thirds share, was so long engaged in overhauling, assembling and repair work, has produced in August 1951 its first trainer aircraft constructed at the Aircraft factory and designed entirely by Indian personnel.

3. *Railway and Locomotives Industry.*—For lessening the dependence of the Indian Railways, upon foreign sources for locomotives, the Government launched the Rs. 14-crore project of a Locomotive Workshop at Chittaranjan (Mihijam) near Asansol. It is designed to produce 120 locomotives and 50 spare boilers per annum. This is in addition to the existing railway workshops and repair establishments, one of which at Tatanagar has been sold to the Tatas for development as a Loco Building Shop. First India-made locomotive from assembled parts has been produced in 1950 and named *Deshbandhu.*

4. *Mathematical Instruments.*—The Office and Workshop at Calcutta started in 1930 as a small repair and service depot for the instruments used by the Survey of India has now begun to manufacture all kinds of precision instruments—mechanical, optical, electrical, aircraft etc.

5. *Machine tools industry*—is a "master key" industry on which depends the prosperity and security of a nation. It is through machine tools that expansion of essential services, such as Defence, Railways etc., can be made. To-day, there are about 16 graded and 50 ungraded firms with production to the value of Rs. 4 million. The present production does not meet more than 3 per cent of the total requirements of the country. The industry is not yet in a position to manufacture precision types of modern machine tools. So the Government of India entered into an agreement with the Oerlikon Machine Tool Works, Buhrle & Co., Zurich, Switzerland for the supply of technical experts and also starting a machine tool factory at Bangalore.

6. An agreement in 1949 with two French firms is designed to process *monazite sands* in India required for use in various industries of India which at present depend on imports. Traces of uranium are also expected to be present in these sands.

7. Another French firm is preparing a scheme for the production of *radio and radar equipment* in India.

8. The Government of India have also planned to build 4 factories in association with a German firm for the manufacture of synthetic oil from coal in unit capacities of 1 million tons, 500,000 tons, 250,000 tons and 100,000 tons.

9. *Factory for the manufacture of Dry Core Telephone Cables*—The annual requirements of dry core paper-insulated telephone cables for Posts and Telegraph Department alone is about the value of Rs. 8 crores. Government have entered into a technical assistance agreement with a firm in U. K. Standard Telephone and Cables Ltd. for the setting up of a factory near Locomotive manufacturing works at Chittaranjan.

10. *Scheme for the manufacture of Penicillin, Sulpha and Anti-malarial Drugs*—The scheme contemplates the manufacture of Penicillin, Sulpha and anti-malarial drugs at a capital cost of Rs. 35 million; 51 p.c. of which will be contributed by the Government of India and 49 p.c. by the Government of Bombay. An offer of monetary and technical assistance for Penicillin Project in India was received from WHO and U.N. International Children's Emergency Fund at the end of 1950 for setting up a penicillin factory with their collaboration. The agreement was concluded on July 24, 1951 for starting a factory at an estimated cost of 20 million rupees.

11. A *telephone factory* has been started at Bangalore by the Government of India in collaboration with the Automatic Telephone and Electric Company Ltd., of England for the manufacture of automatic telephones and carrier equipment. It is being now worked as a private limited company at which about 90 p.c. of the share capital is held by the Governments of India and Mysore. The remaining roughly 10 p.c. has been alloted to Automatic Telephone and Electric Co., Ltd., of England.

12. Council of Scientific and Industrial Research has evolved a new process for the manufacture of stamp-cancelling and printing inks. In 1950, the Council installed a pilot plant for manufacture of these inks with a capacity of 1,500 lbs. per day. It is now proposed to increase the plant. Apart from the profits, it has an important bearing on the saving of hard currency as rotary newsprint ink is mostly imported from U.S.A.

DESCRIPTION OF INDIAN INDUSTRIES

1. **Cotton Textile**—is by far the largest industry of the country with about Rs. 51 crores worth of fixed capital and more than Rs. 100 crores worth of productive capital employed. It employs about 6 lakhs of workers. There are 484 mills in the Indian Union, many others being in course of erection and planning. This shows the extent of growth of the industry since 1818 when the first cotton mill was established in Calcutta or better since 1854 when the first Indian-owned mill went on production in Bombay.

As a cotton producing country Indian occupies the second place in the world and is still the greatest in the east. To-day India has 484 mills in which the yarn produced on about 10,000,000 spindles is woven into cloth on 202,814 looms.

Although Bombay, Ahmedabad, Sholapur, Kanpur, Nagpur, Indore, Mathurai and Coimbatore are the main centres of the industry, the Bombay State counts for more than half of it. It is in Bombay therefore that the Indian Central Cotton Committee maintains its Technological Laboratory, complete with an experimental spinning plant and a scientific laboratory together with a testing house for research on cloth fibre. The Department of Chemical Technology of the Bombay University is also carrying useful research. Ahmedabad Mill Owners' Association has also started a Research Institute.

With the growth of the industry in India, not only have imports fallen down but the industry has built an export trade of its own in piece-goods as well as yarn. It may be noted in this connection that a major portion of the yarn surplus is turned over to the handloom weaving industry, which by he way is the most important cottage industry of the country, employing about 20 lakhs of weavers throughout the country.

2. Iron and Steel—Regarding the production of iron and steel in India, a period of nearly 2,000 years has been claimed for the iron and steel industry. Its history is replete with reference to the famous Damacus or Woodze sword, steel for which is said to have been supplied by India. Coming to less remote times the aborigines of Central India and neighbouring areas have been known to smelt ore into iron in small mud furnaces with the aid of wooden bellows for the supply of the necessary blast to produce the metal.

First attempt to produce iron was made by Mottee and Farquhar in 1779 and second attempt by Josiah Heath in 1830, both of which proved abortive. The next commercial attempt was made by Barakar Iron Foundry at Kulti (Bengal) which passed into the hands of Barakar Iron and Steel Co., in 1887. Two years later it was transformed into Bengal Iron and Steel Co., and in 1919 it came to be known as Bengal Iron Co.

The more outstanding success in manufacturing steel in India on a commercial basis was that of Tata Iron and Steel Co. The company started its steel works at Sakchi in 1908. Pig iron was made in 1911 and the first steel ingot a year later. The Company is now capable of producing over 750,000 tons of saleable steel a year. *Indian Iron and Steel Co.*, was started in 1918 at Hirapur about four miles from Asansol. In 1936 the Company absorbed the Bengal Iron Company which operated at Kulti. After the amalgamation of the two companies the *Steel Corporation of Bengal* was constituted in 1937 in association with the Indian Iron and Steel Company. An iron works was started in Bhadravati in Mysore State in 1921 which came to be known as the *Mysore Iron and Steel Works.* The main source of ore supply is the Kemmangudi ore field. The Company's present annual production capacity is about 25,000 tons of finished steel.

Ancillary Industries—The iron and steel industry in India may be divided broadly into two categories—basic and re-rolling. The main producers who may be placed in the first category is iron ore who makes pig iron out of which they manufacture steel. Alongside these there is a wide range of subsidiaries. There are the re-rollers who produce certain sections of steel machines from billets and scrap supplied by the main steel producers. It is estimated that there are about 95 steel re-rolling mills in India. Following are the main ancillary industries—(1) *Tinplate* for the metal box and container produced by the Tinplate Company of India Ltd., (2) production of wide range of light rod, hard bright, galvanized and barbed wire, wire nails, bolts and nuts and rivets by Indian Steel Wire Products Ltd. and others who can manufacture railway permanent way equipment including steel sleepers, points and crossing rails, signal materials, special bolts and nuts, (3) there is a steel processing industry for construction of wagons and other railway rolling stock. The most important among them is the *Indian Standard Wagon Co., Ltd.*, (4) there are companies producing machine tools.

3. Jute—This important textile industry has the distinction of accounting for over one-third of the total export trade of the country. The progress of the industry can be gauzed from the fact that India has today become the chief jute manufacturer consuming more than 60% of the raw jute of this sub-continent, while Dundee (U.K.) was the leading manufacturer of jute goods in 1855 when the first power mill for spinning jute was started near Calcutta, the first weaving mill being started in

1859 in the same province. But almost the control of the industry with 112 mills, 71,324 looms and about 12 million spindles, is in European hands. The total capital invested in the industry is about Rs. 30 crores and the industry employs more than 3 lakhs of workers on the average.

As the two Bengals constitute the major jute production area, the industry has been so highly localised that of the 112 mills in India 100 are in West Bengal which province also accounts for 68,138 looms.

One peculiar feature of the industry is that since industry is based not a little on the export demand, any slackness in it during a year or a season causes the industry to close a portion of its installed capacity. This bespeaks among other things a complete negligence or lack of enterprise in finding out new uses for the golden fibre. This defect has been sought to be removed by the establishment of an Institute of Jute Technology at Calcutta in 1948 under the auspices of the Calcutta University by the Indian Jute Mills Association. Even before that, the Indian Central Jute Committee established the Technological Research Laboratory at Calcutta to tackle all the technical problems of the industry including spinning tests at a standard temperature and humidity. At present the mills concentrate on producing mainly (1) *gunny bags* or cloth used for packing rice, wheat, oil seeds etc.: (2) *hessian cloth* or *bags* used for bailing cotton, wool and other fibres; (3) *coarse carpets* and *rugs* and (4) *cordage.*

Since the division of the country this highly capitalized industry has become a problem, because 73% of the total jute area of this sub-continent with jute monopoly is in East Bengal where again the high quality jute required for supplying the export demand of jute goods is available. but the recent jute cultivation drive in West Bengal and other parts of Indian has yielded substantial results.

4. Coal Industry—The industry is governed by the Colliery Control Order 1945 and the Mines and Minerals (Regulation and Development) Act, 1948. *A Coal Mines Stowing Board* was created in 1939 under the Coal Mines Safety (Stowing Act) 1939 to administer the fund which is raised by the levy of cess on coal and coke and to spend it on stowing of coal and other operations to prevent fires in mines and to avoid wastage of coal. An *Indian Bureau of Mines* was established in March 1948. Its functions, among others are inspection of mines with a view to effect general improvement of mining method, conservation of mineral wealth by planned working, recovery of the largest possible quantity, probing of mineral deposits by the use of modern methods of prospecting, advising governments on questions relating to mineral concessions, royalty, rents, taxation and tariffs, export policies etc., and organisnig on problems relating to mining. The *Indian School of Mines and Applied Geology,* Dhanbad was established in 1926 and is the only institution of its kind imparting higher technical education in mining and applied geology. The *Fuel Research Institute* at Dighwadi helps to spread the knowledge of the composition of coal and of factors that influence its behaviour when heated. A Fuel Economy and Combustion Section is being organised by the Institute to advise the consumers of coal on fuel economy, washability of Indian coals and blending of coal for cooking purposes.

There has been proposals for State acquisition of mineral rights as a step towards nationalisation of coal industry. According to the Industrial Policy Resolution of the Government of India, coal is one of those industries for which the State will be exclusively responsible for the establishment of new undertakings except where in the national interest, it is necessary to secure cooperation of private enterprise subject to such control as Central Government may prescribe.

5. Sugar—Sugar mills on modern lines were first started in India about the year 1903. Sugar manufacture is now the third largest industry of India after cotton and jute textiles. Though the sugar industry is enjoying tariff protection since 1932, it is strange that after 18 years of such help the industry not only refuses to stand on its own leg but has not used its days of prosperity to take to more efficient methods of production or to lower the cost. Yet the industry is now the second in the world. with about 26% of the world's cane sugar production, the first one being Cuba.

The industry is concentrated in the two notable sugarcane producing provinces of Bihar and the U.P. which account normally for about 80% of the total production of the country.

As yet only about 25% of the total sugarcane production is used for direct manufacture of sugar, more than 60% being utilised in *gur* (molasses) production which in recent years has varied between 2·3 to 4·3 million tons. In India three different processes of refined sugar manufacture are prevalent; and they are (1) direct from cane in modern vacum pan factories, (2) from cane by indigenous open pan factories, *i.e.*, "Khandsaris" (*i.e.*, through the intermediate process of Rab) and (3) from gur refined in modern factories. The Indian Institute of Sugar Technology at Kanpur is carrying on research on the scientific and technological aspect of sugar manufacture since its establishment in 1936 and its fruitful studies are already being adopted, although to a very limited extent by the factories.

The yield per acre of cane in India is as low on the average as 15 tons compared to about 4 times in Java which however can easily be attained if the researches of the Indian Sugarcane Research Stations at Coimbatore, Karnal and other places are fruitfully utilised. The sugar content of the Indian cane is also very low and it is hoped that the newly established Indian Central Sugarcane Committee will bring into use the improved varieties evolved in the country.

The area under sugar cultivation in India is larger than in any other country in the world. But the average yield per acre is low, though it is improving rapidly with the replacing of low quality canes by those of good quality, mostly supplied by the Indian Sugarcane Breeding Station at Coimbatore. It is interesting to see in this connection that the *per capita* sugar consumption of the country (with gur) continues to be as low as 30 lbs. (gur accounting for 24 lbs.) compared to 112 lbs. in U. K., 114 lbs. in Australia, 115 lbs. in New Zealand, 128 lbs. in Denmark and 11 lbs. in Java.

6. Paper and Paper Boards—Paper-making was a flourishing cottage industry in India employing whole villages even in the 18th century. The first paper-mill was started in India a century ago by Dr. William Carey, the famous missionary. It did not make much headway. In 1867 another mill was started at Bali in Bengal. Later, a few mills were started in Bengal and Bombay. With the help of protective tariffs from 1925 to 1947 industry maintained a steady growth though slow as yet to make the country self-sufficient even in paper and paper-boards, not to speak of newsprint for which we are as yet dependent on imports.

The present installed capacity of the industry is about 1,15,000 tons for all varieties of paper and output is about a lakh of tons. And with imports the average *per capita* consumption comes to about 1·4 lbs. as compared to 150 lbs. in U.K., 175 lbs. in Canada and over 300 lbs. in the U.S.A. Though as yet in insufficient quantity, India produces varieties of paper and boards including toilet paper, craft paper, mill boards, corrugated boards, grey boards, duplex and riplex boards etc. Proposals for expansion to new sides have already been made, including the establishment of 3 newsprint mills.

At present (1951) are 18 mills in India producing paper, including three which are also engaged in the production of pulp boards. Besides there are seventeen mills manufacturing straw boards. The largest number of units are however situated in Bengal and 50 per cent of the total production of paper is in this State.

The greatest achievement of the industry is the development of bamboo pulp as a suitable raw material for the manufacture of paper.

7. Leather and Tanning—Leather industry in India ranks probably fourth in importance as an earner of foreign exchange. The value of leather manufactures exported every year exceeds Rs. 200 million. The expansion of the tanning industry to meet fully the internal requirements of leather and leather goods and to leave a large surplus for export has been possible owing to the large availability of the principal basic raw materials within the country, *viz.*, hides and skins. The production of raw hides and skins at present is estimated at 60 million pieces of which buffalo hides are 4·8 million pieces, cow hides 14·2 millions, goat skins 29·7 millions and sheep skins 11·8 millions. The leather goods industry with the exception of one or two units is wholly a small-scale or cottage industry. The tanning industry in India could be broadly classified into the following categories—(1) Tanneries producing finished vegetable-tanned leather by Pit tanning process and chrome-tanned upper leather. There are at present 26 tanneries falling in this category. (2) Tanneries producing vegetable tanned lather known in the trade as East India tanned kips and East India tanned skins. There are about 500 cottage and small scale tanneries mainly situated in South India producing this class of goods known as East India tanned kips and tanned skins by the process of vegetable tanning. (3) Chinese chrome tanners producing chrome tanned upper leather. There are about 250 small-scale chrome tanneries situated mainly in the Calcutta area and owned and worked by the Chinese community. (4) Village tanners producing vegetable tanned cow and buffalo leather and vegetable tanned leather producd from goat and sheep skin. Number of village tanners is unknown, but in most villages, vegetable tanning is carried out on a cottage basis.

By far the largest utilisation of leather is in the production of footwear. Footware produced in this country may briefly be classified into two categories—(1) Western types, (2) Indian types. The footwear producers are classified into three classes—(*a*) machine made section, (*b*) small scale section, (*c*) cottage industry section. The small scale section of the industry is mainly located in Agra. Agra also is the main centre for footware on a cottage industry basis, although there is considerable production on this basis in Calcutta and Bombay and on a small scale in most parts of the country.

India exports annually leather manufactures valued at over Rs. 200 million, the most important item being tanned or dressed cow hides which account 35 p.c. of total exports.

8. **Hosiery**—Industry has been in existence in India for the last 50 years or so. It received a great impetus from World War I. Thereafter the grant of protection since 1934 against the growing Japanese competition gave a great impetus to the production and trade which was further increased during World War II.

The industry has had no apparent need to be localised as its units vary from sections in large textile mills to fairly large-sized hosiery factories employing power-driven knitters and cottage industry scales also. This is true specially of the *cotton* hosieries, the *silk and woollen* hosieries being mainly localised in the Punjab, the U.P. and Bombay.

9. **Petroleum Industry**—Indigenous supplies in undivided India came from the oil fields in the North Punjab and North Assam. On partition of the country oil fields in the North Punjab went to Pakistan. The Indian industry in oil is thus at present confined to a relatively small area in Assam. Mineral oil is mainly obtained from Digboi oil field owned by Assam Oil Company. It is now managed by Burmah Oil Co. It has a refinery at Digboi and a tin factory at Tinsukia. The industry is governed by the Mines and Minerals (Regulation and Development) Act 1948 which empowers the Central Government to regulate mines, oil fields and mineral developments on the lines contemplated in the Industrial Policy Resolution of April 6, 1948. The Petroleum Division of the Ministry of Works Production and Supply is the coordinating executive authority in India for all users—civil and military—on all policy questions connected with the supply of petroleum products of all kinds. A Petroleum Advisory Committee has been formed to consider all problems relating to the petroleum industry in India.

10. **Silk Industry**—The silk industry in India consists of two parts—(1) the rearing and production of cocoons which include mulberry cultivation, (2) the reeling and production of raw silk including utilisation of by-products. The first part is essentially a cottage industry, while the second part is a combination of cottage and small-scale factory industries utilizing the collective output of the first. Sericulture industry occupies an important place in the economy of the States of Madras, Mysore, West Bengal, Assam and Kashmir and Jammu. The other States which produce mulberry raw silk are East Punjab, Himachal Pradesh, Bombay, Uttar Pradesh, Madhya Bharat and Bihar.

Regarding raw silk production, India produces approximately 21 million lbs. of mulberry raw silk valued between Rs. 65 to about Rs. 80 million a year and about one million lbs. of non-mulberry silk *i.e.,* Tassar, Eri and Muga valued at Rs. 20 million. The States which produce fairly large quantities of non-mulberry silk are Assam, Bihar, Madhya Pradesh, Orissa and to some extent West Bengal.

Raw silk whether mulberry or non-mulberry is in itself a raw material. This raw material has to be thrown and twisted and silk yarn thus produced from raw silk is used for weaving silk textiles and other silk goods. Non-mulberry raw silk is used almost wholly for civilian fabrication purposes, whereas mulberry raw silk has vital importance for Defence services of the country. Dropping silk parachutes were made during

World War II which absorbed all the silk manufacture of India at that time.

The Government of India has been giving tariff production to sericulture industry since 1930. For the improvement of silk industry in India under Central control a *Central Silk Board* has been established in 1949 under the Central Silk Board Act LX of 1948. The functions of the Board are—(*a*) undertaking, assisting or encouraging scientific, technological and economic research, (*b*) devising means for improved methods of mulberry cultivation, rearing, developing and distributing healthy silkworm seeds, reeling cocoons, improving the quality and production of raw silk, if necessary, by making if compulsory for all silk to be marketed only after the same has been tested and graded in properly equipped raw silk conditioning houses. The Board is a joint organisation of the Central Government and the State governments and of the industry itself.

11. **Woollen Goods**—manufacture has for centuries been an important cottage industry in India famed specially for its shawls and carpets with centres in Kashmir as well as in the Punjab and the U.P. The modern mechanised industry, however, is of comparatively recent growth. Of more than 40 million lbs. of the total annual wool production about 54·5 million lbs. being generally exported every year. Major portion of India's wool output is however suited only for the production of blankets, carpets etc., being generally light, coarse, uneven and short. So India has to import annually over 19 million lbs. of superior wool from the other countries.

The two world wars gave a great fillip to the growth of woollen mills in India. With the invested capital amounting to above Rs. 4 crores and employing on the average above 20,000 workers annually, the industry has at present an installed capacity of about 30 million lbs. This is in additon to handloom weaving which engages about 87,000 looms and 1·3 lakhs of workers to produce annually about 14 million lbs. more.

Of the total of about 32·6 million lbs. of wool used annually in India for the manufacture of woolen goods, about 50% is used for the manufacture of cloth in the modern mills, the rest being used for yarn and other purposes. All the finer woollen goods are made exclusively from imported woollen yarn in the modern mills located in the East Punjab, the U.P., Bombay, Mysore and Kashmir. Other goods, such as country tweeds, *lohis*, shawls etc., are also manufactured in the mills of all these areas including Himachal Pradesh.

12. **Cement**—manufacture was first started in India in 1904 with the establishment of a small factory in Madras but it failed. About 1912-13 three more companies were registered at Porbandar, Bundi State and Central Province which came into production in 1914-16. Seven more companies were established during First World War, but soon after crisis overtook the industry and several companies had to go into liquidation. The matter was referred to the Tariff Board in 1925 and under its recommendation an Indian Cement Manufacturers' Association for determining sealing price was formed. In 1927 the Concrete Association of India was formed to educate the public in the uses of cement and to render technical advice. The members of the Indian Cement Manufacturers' Association agreed to contribute 5 annas per ton on the sale of their cement.

The Cement Marketing Co., of India Ltd., was formed in 1930 to economise marketing and distribution expenses of cement. Though at first hesitant, almost all the manufacturers joined the marketing organisation.

With the help of Concrete Association and Cement Manufacturing Co., the consumption of cement gradually increased. Afterwards all the manufacturers with the exception of Sone Valley Portland Cement Co., merged with one company under the name of *Associated Cement Companies Ltd.,* in 1936. They owned ten companies. In 1937 Dalmia group entered the field with five cement factories in different parts of India. So a cut-throat competition developed between the two groups but ultimately the two groups joined together to market their products jointly under the aegis of Cement Manufacturing Company of India. These two major groups have again separated since March 1948.

In India total annual installed capacity of cement at present (1951) is about 2·815 million tons. Today A.C.C. are the biggest manufacturers and the powerful group; next comes Dalmia group. All the others are miscellaneous concerns having no chain works in the industry.

The present installed output (1951) is as follows:—

Bihar ..	.. ·680 tons	Hyderabad ..	.. ·240 tons
C. P. & C. I.	.. ·400 „	Mysore ..	.. ·020 „
Rajputana ..	.. ·225 „	Travancore ..	.. ·610 „
East Punjab	.. ·270 „		
Kathiawar ..	.. ·320 „		2·815 tons

There are at present 21 cement factories in India. Seven schemes, of which four are new are nearing completion.

13. Rubber—India produces annually 16,000 to 17,000 tons of raw rubber. This manufacturing industry consumes all that plus approximately another 6,000 tons which manufacturers import from abroad. The industry has not to seek outside market, but with government protection, obtains a price in India for the rubber which is well above the world level. But the production per acre of India is very low. It is only 300 lbs. per acre today compared with Malayas' 500 lbs. The type industry of India is the principal consumer of raw rubber, consuming almost 80 p.c. of India's production. Of the world output nearly 70 p.c. goes into manufacture of pneumatic typres. India's advantage lies in that she has her own rubber plantations concentrated in the south, mainly Travancore.

Indian Rubber Board has been constituted under the Rubber (Production and Marketing) Act, 1947 for the development of the rubber industry in regard to production and marketing of rubber. It encourages research on rubber, supplies technical advice to rubber growers, improves marketing and collection of statistics and advises government on all matters relating to development of rubber including imports and exports of rubber. The price of rubber produced in the country is fixed statutorily. The Board is financed by a cess levied on all rubbers produced in the country and fees levied for licences issued to dealers and manufacturers.

The major units of rubber production in India are as follows:—(1) tyres and tubes, (2) rubber-covered cables, (3) foot wear, (4) mechanical and general rubber goods, (5) Dipped goods such as tops, balloons, industrial and surgical goods, surgical gloves etc. The real large-scale production in India began in 1936 with the establishment of Dunlop Rubber Factory at Sahaganj near Calcutta.

14. Match—manufacturing hardly existed in this country before World War I although the first factory, and with Indian management, was started at Ahmedabad as early as 1895. A considerable expansion of the industry was however made after the imposition in 1922, of a revenue duty on imports which was converted in 1928 into a protective duty. The effect was conspicuous in that 1926 a large proportion of the internal requirement of about 18 million gross was produced internally. And the foreign exporters found it so difficult that a big Swedish match combine came to India and established many factories, at Bareilly, Ambernath, Calcutta and Madras, under the name and style of the Western India Match Co., Ltd. Despite a virtual growth of monopoly by the company which supplies about 80% of the demand now, there has been a considerable growth of indigeneous factories. There are at present about 50 match factories in India employing about 16,000 workers and their installed capacity amounts to 80,000 cases. The installed annual capacity of the industry is 800,000 cases of 50 gross of 144 boxes each.

15. Glass Industry—The art of glass-making has been known in India for ages and at least for one branch *viz.*, bangle-making, it has been practised for several generations by the *Shishgars* of Firozabad, one of the artisan classes of the country. The first attempt to manufacture glass and glass-ware on modern lines dates back to 1892 when a bottle-making factory was started at Jhelum by Muree Brewery. The first glass factory under Indian management was started afterwards at Titaghur under the name of Pioneer Glass Works. Both the above factories were closed down. Some of the factories were then established and struggled hard and managed to survive at Allahabad, Ambala, Bahjoi and Talegaon. The present day glass factories in India are modelled on the Japanese lines probably owing to its earlier association with the Japanese experts. The first World War (1914-18) gave momentary impetus to the industry owing to the stoppage of imports and the number of factories increased from 3 in 1914 to 14 in 1918. Inspite of strong foreign competition, the industry made considerable progress during inter-war years.

The outbreak of the World War II gave a another strong fillip to the industry and the industry developed on fairly systematic lines and articles of better quality was produced. The number of factories increased from 80 to 147 and production from 6 million sq. ft. of sheet glass and 43,000 tons of other glassware in 1939 to 13 million sq. foot and 110,000 tons respectively in 1945. At present there are in Indian Union 224 glass factories including 93 manufacturers of bangles and beads and false pearls. The present distribution of glass factories in the country is as under—

Total No. of Factories

U. P.	114	Madhya Pradesh	6	E. Punjab	7
W. Bengal	34	Bombay	32	States	12
Bihar	8	Madras	7		
Orissa	1	Delhi	3	Total	224

The bangle making industry is concentrated in U.P. There are at present three factories in the country which produce sheet glass with a total insalled capacity of about 23·4 million sq. feet. Bulk of the imports of sheet glass comes from Belgaum. As regards *blown ware and pressed ware,* there are three categories (1) bottle and philes, (2) lamp-ware, (3) table-ware and pressed ware. Next important item of glass is *bangles.* There are three main types of bangles, namely Reshmi, Hollow, and Fancy. Besides these three, there are other types which are produced on a cottage industry basis. There are 86 bangle factories in Firozabad (U.P.) alone, besides several hundreds of workshops on a cottage industry basis in U.P., Madras, Poona.

16. Plywood Industry—The plywood industry in India is still its infancy. The annual estimated demand for plywood is 150 million square feet valued at Rs. 4 crores. India requires 5·5 million tea chests a year as containers for annual production of tea. As against this, indigenous production of tea-chests is estimated to be between 2·5 and 3·5 million a year. So large quantities of plywood used for packing Indian tea are imported from U.S.A., Canada and the U.K. and Finland. With the outbreak of the first world war in 1914, due to the extreme difficulty of foreign import, some firms in India were encouraged to start factories for manufacture of plywood. The pioneers in this industry are Assam Saw Mills and Timber Co., and Assam Railways and Trading Co. situated in Assam. With the cessation of imports during World War II, many small plywood factories were started bringing the total to about 80. Andaman Islands also produce suitable timber for plywood. The plywood industry is now protected by the Government.

17. Soap—industry had made remarkable progress even before the war and had built an export trade of its own. Indian soap industry has certain natural advantage due to India being world's largest producer of vegetable oils and fats and also sandel wood oil, lemon grass oil, ginger grass oil, citronella oil, etc., are also available. But the chief ingredient of soap, caustic soda still remains a major item of import which is retrading the progress of soal industry. The present installed capacity is for 250,000 tons per annum but in 1949 only 105,000 tons of soap were produced. One third of the total capacity production is by numerous small scale factories who manufacture soap by cold and semi-boiled processes. Indian exports a fairly high amount of soap.

18. Oil-milling—is an important industry of India. Even before the establishment of power-plants, a large part of the oil-milling was and is done in the villages in archaic methods. But it is important to note that with the establishments of modern power-plants, India no longer exports the major portion of her various oilseeds to be milled abroad. On the contrary the country now mills the major part of the groundnuts, linseed, castor seed, cotton seed and other edible and industrial oils. The growing demand for industrial oils for lubricating purposes as well as production of paints and varnishes within the country along with increased demand for hydrogenated oils for edible purposes (*i.e., vanaspatis*) bids well for the future of the industry. The industry is also important as this makes possible the sufficient supply of oil cakes as cattle feed and manure.

19. Tea—is a plantation industry of great importance to India as the second biggest export item of the country at present, supplying about 15% of the total exports in value. The industry part of it lies in cutting, drying and blending of the leaf and in that India specialises unlike China, to whom she is second in the world in production, in black tea. It means that unlike the green tea, the black tea is processed in factory through courses of withering, fermentation and drying. It is well-known that the Northern India accounts for about 80% of the total India tea producetion averaging about 550 million lbs. Assam producing over 70% of it. Of the total production about one-fifth only is consumed internally, the rest being exported to make India the world's biggest exporter of tea.

One new fact about the industry has been the setting up of the *Central Tea Board* in 1949, in place of the new defunct Tea Market

Expansion Board, with headquarters at Calcutta. The new Board is composed of the representatives of the planters as well as the exporters, the trade, labour, Chamber of Commerce, the Central Government and the Governments of the tea-growing areas. Financed by a cess collected on the export of tea, the Board is to arrange for research, collection of statistics, fixing of grade standards, improving the marketing of tea and bulk-buying of tea on behalf of the Government. It carries on propaganda to increase the consumption of tea in the country and elsewhere.

20. Coffee—is a plantation industry of India confined in the South. It provides employment to 1½ lakh people. The industry is confined in the provinces of Madras. Coorg and the States of Mysore, Travancore and Cochin. *Indian Coffee Board* which is constituted under the Coffee Market Expansion Act, 1942, controls the marketing and export of coffee. All coffee grown in the country is required to be delivered into a pool maintained by the Coffee Board.

21. Tobacco—India is the third largest tobacco-producing country in the world. It is third after U.S.A. and China. Madras is by far the most important State accounting for nearly 50 p.c. of the area in the country. Bombay, U.P. and Behar are next in importance in that order and together claim about 40 per cent of the total acreage in the country.

About Rs. 20 crores are invested in this industry. The industry embraces plantations for the cultivation of leaf and factories for curing, manufacture of cigarettes and smoking tobaccos, paper mills, printing factories and tin box fabricator. The indegenous tobacco industry in India to-day caters for over 95% of the trade. The consumption of cigarettes though considerable is dwarfed by that of *bidis*, sales of which are roughly seven times those of cigarettes.

The two important tobacco species, namely *nicotiana rustica* and *nicotiana tobacum* are cultivated in India. The former is less important commercially, for it is not quite suited for modern tobacco industries of the world. The other species, namely nicotiana tobacum is distributed throughout the country and plays an important role in the international tobacco trade. The important types of this species cultivated in India are cigarette, cigar, chiroot, bidi, chewing, hookah and snuff tobaccos. Under the cigarette type *Virgina tobacco* of varying degree of excellence is produced in the country and is concentrated manly in Madras State. Important virginia growing districts are Guntur, Kistna, East and West Godavari. This variety is also cultivated in Bihar, Uttar Pradesh, Mysore, Hyderabad and Baroda States in small quantities. The chief Virginia variety grown in India is Harrison special.

Though on a small extent, *White Barley tobacco* is also cultivated in India in the Guntur district of Madras. *Natu* tobacco grown in Guntur, East and West Godavari and Vizagapatam district of Madras and *Desi* tobacco grown in Bihar State are also used in the manufacture of low grade cigarettes as well as for pipe and shag mixtures.

The *bidi tobacco* is mainly produced in the Gujerat and Nepani areas of Bombay State and to a small extent in Mysore State. No variety is specially grown in any appreciable extent for chewing, hookah or snuff alone. Thus the *Desi* variety grown in Bihar is used for chewing and also for hookah and even to some extent for cigarettes. *Jati tobacco* of Bengal is used both for chewing and hookah.

The total output of Indian tobacco is estimated at 850 million pounds. Although the bulk of the tobacco production in India is consumed wihtin the country, the increasing quantities now exported form a valuable addition to the country's earnings of foreign exchange.

Tobacco has always been a source of nicotine, which is its chief by-product. It is an efficatious insecticide. It is also a source of nicotinic acid.

United Kingdom ranks first as a market for Indian tobacco.

22. Automobile Industry—The automobile industry in India is of comparatively recent origin. Before World War I only three companies in India, *General Motors Ltd., Ford Motor Ltd.,* and *G. McKenzie & Co., Ltd.* were engaged in the assembly of motor cars. Now in 1951 there over 12.

The assembling capacity for cars and trucks before World War II was less than 30,000 annually. Now it has risen to over 80,000. The paid-up capital of all the plants now in operation (1951) is about 9,20 lakhs.

During the war, India developed its engineering industry and bodies were made for military vehicles, and during last few years there has been considerable expansions of the Indian automobile industry. Although a completely Indian car is not in sight—operations are still largely assembly—there has been an appreciable progress towards its manufacture in India.

Some leading firms for assemblies—General Motor Ltd., started assembling motor cars and trucks in India 1928. In 1939 they started a new unit called the *Commercial Body Building Corporation. Ford Motor Company of India Ltd.,* is a private company established in 1926 with its head office and plant at Bombay. It is subsidiary and wholly owned by Ford Motor Company of Canada Ltd. *Hindusthan Motors Ltd.* started its operations at the end of 1948. Their factory is at Uttarpara, near Calcutta. The company has entered into a technical assistance agreement with Morris Motors of Britain and Studebaker Export Corporation of U.S.A. *Premier Automobiles Ltd., of Bombay,* came into existence in 1946. They have entered into technical assistance agreement with Chrysler Corporation of Detroit (U.S.A.) for initial help in the manufacture of automobiles in India.

Ashok Motors Ltd., was started in 1947 and they negotiated an agreement with Austin Motor Co., Ltd., and Austin Motor Export Corporation whereby they secured the sole rights of importation, distribution, assembly and progressive manufacture of Austin products throughout India. The assembly operation has begun from September 1949. The Company has its head quarters and factory at Ennore, near Madras. *Peninsular Motor Corporation* is a subsidiary of the British India Corporation of Kanpur Corporation has started to build and deliver Hudson cars, International Chassis and its office and factory is situated in Convent Road, Intally, Calcutta.

Other important assembling companies are *Addison & Co., Ltd. of Madras, Standard Motor Company India, French Motor Car Co., Ltd., of Calcutta. Rootes Group of United Kingdom* have started assembling works solely for defence and commercial purposes; *Mahindra and Mahindra Ltd.,* with a capacity of 1,500 Jeeps and *Dewars' Garage and Engineering Works,* Calcutta with a capacity of 750 Albion trucks and Land Rovers.

23. Battery Industry—The Indian industry was born in 1933 when lead plates for automobile batteries were first manufactured here. At that time however practically every other component part of the battery had to be imported. But with the advent of World War II, the foreign batteries virtually disappeared from the market. The industry now began to forge ahead. By the time the War was over, Indian manufacture stood very nearly on equal footing, making all the component parts of its batteries in this country. However the greatest impetus to the Indian industry was given 1948 when on the recommendation of the Tariff Board, the Government of India imposed a protective duty of 80 p.c. (preferential) and 87½ p.c. (standard) on the import of motor vehicle batteries—A protection which Indian industry still enjoys. Not only in automobile batteries but also batteries for train lighting, telephones, telegraph, and firm lighting are also being made in India which promises self-sufficiency in the next five years.

24. Paint and Varnish Industry—Indian paint industry has made notable advance during and after the Second World War, the principal achievement being the progressive improvement in the quality of products, indegenous manufacture of zinc, lead, chrome and other pigments and developments in regard to the production of nitrocellulose lacquers by modern methods. The production of titanium dioxide pigment constituted another achievement. The productive capital invested in the trade in 1948 was 3·53 crores. The actual production in 1950 was 28,000 tons as against installed capacitl of 60,000 tons.

25. Dry Batteries—The first factory for the manufacture of the dry batteries in India was set up in Calcutta in 1926 by the *Everyready Company of U.K.* In 1936, the *National Carbon Company of U. S. A.* acquired this factory and it has been managed by that firm ever since. In Bombay another factory was started under the name of *Estrela Batteries Ltd.* Other two firms have come into existence *i.e. Sunbeam Electrical Industries at Bombay* in 1949 and *Solar Flashlight Batteries* in 1950 at Bombay. The types of batteries at present manufactured in India are—Flashlight cells and cells for cycle lamps, Radio batteries, Battle batteries, Inert cells and sac elements for telegraph batteries. The main raw materials required in the manufacture of dry batteries are manganese dioxide, graphite, carbon rods, acetylent black, ammonium chloride and zinc sheets. The dry battery industry has still to depend on foreign countries for the supply of raw materials and component parts.

26. Sports Goods—Sialkot (West Punjab) was the main centre for the manufacture of sports goods in undivided India. With the partition of the country, the industrialists came to India from Sialkot and succeeded in re-establishing manufacturing centres at Delhi, Meerut, Agra, Jullundur and Batala in the Indian Union. The sports industry is rapidly developing in Jullundur. Government have provided sites for setting up of nearly 151 factories. The production of sports in India is of the order of Rs. 10 million. The manufacture of sports goods is essentially a cottage industry. The capital investment required is not large. Following goods are being produced in different centres in India—(*a*) Footballs, volley balls, basket balls. (*b*) Cricket balls and hockey balls, (*c*) Badminton rackets. (*d*) Shuttle-cocks, (*e*) nets, (*f*) gut for badminton and tennis rackets, (*g*) Cricket bats, hockey sticks, (*h*) Soft leather sports goods, (*i*) Sports and athletic wear, (*j*) other miscellaneous articles, such as brilliard cues, fishing rods, etc.

Tennis and badminton rackets are manufactured at Meerut, Jullundur and *Batala*. *Cricket bats*—Willow is the only timber suitable for a cricket bat of high quality. Substitutes of the cricket bat has been grown in

Kashmir; Chinese tallow trees is one of the best substitutes. Indian poplar is used for cheap types of bats. Cricket bats are now manufactured at Jullundur and Meerut. *Hockey Sticks*—Mulberry has proved to be suitable for hockey sticks in India and is considered a standard wood. Hockey sticks are manufactured at Batala, Meerut and Jullundur. *Fishing rods*—For cheap rods bamboos are used.

The Sports goods are in demand in hard currency areas. There is considerable export, but it is essential that standards should be maintained to assist the trade. The needs of standardisation has become essential as substitutes have to be used as raw materials in some cases. All-India sports manufacturers' Federation, Meerut has been formed to assist the development of the industry.

27. Non-Ferrous Metals.—Non-ferrous ores have been known to exist and to have been worked in India since very ancient times. Before the war small quantities of copper, aluminium, antimony and lead were produced in India. Even now, India is dependent for most of her requirements of copper upon supplies from abroad. So too are lead and zinc. Similarly, nickel, cobalt and tin mainly used for alloys are also imported from abroad. Among the pioneers in the exploitation of India's non-ferrous wealth by modern metallurgical methods is the *Indian Copper Corporation* which commenced manufacturing copper from ore in 1924, and also brass ingots, sheets and circles from Indian copper in 1928. Another company which has played an important part in the development of the non-ferrous metals industry in India is the *Indian Cable Co.,* which was formed in 1920 for manufacturing copper wire and strand for telephone, telegraph and transmission lines, rubber-insulated cables and cotton-covered wires.

Before the war, there were practically no other smelting and refining of non-ferrous metals and alloys, nor any fabrication of semi-finished products, such as rods, sheets or wires. Even in the case of brass sheets, they were barely sufficient to meet 40% of India's pre-war requirements. With the outbreak of the war the position was aggravated with the entry of Japan into the war, as supplies of tin from Malaya and of lead and zinc from Burma were also cut off. This led to the setting up of factories for the refining of scrap. This enterprise actively encouraged by the Government achieved considerable success, so much so that today the smelting and capacity of both yellow and white metal alloys are in excess of the present requirements of the country.

The *Indian Copper Corporation* with mines at Mosaboni (Singbhum, Bihar) and works at Moubhandar is the only copper producer in India. The ore is crushed at Mosaboni and sent some 6½ miles long to concentration plant at Moubhandar. The Corporation was established in 1924 and copper production began in 1928. The productive of copper in India is as follows:—

1946	6,311 tons	1948	5,863 tons
1947 ..	6,936 ,,	1949	6,930 ,,

Antimony—Antimony is silvery white crystaline and brittle metal, imparts hardness and stiffness to several lead, tin and copper alloys. It is important in the manufacture of storage batteries, anti-friction bearing metals, type metals, lead sheets, lead pipes, table ware and ammunition. There are small deposits of antimony in Lehaul (Kangra District, Punjab) and Shagor in Chitral State (N.W.F.P.). Since partition supplies from

Chitral have ceased and ore has been imported from Bolivia. The production of antimony is confined to one company—the *Star Metal Refinery*, Bombay which has its refinery at Vikhroly G.I.P. The installed capacity is about 900 tons. The production commenced in 1941.

Lead—Lead deposits now being exploited in India are the Zawar mines in Udaipur State and the Banjari mines in Jaipur State in Rajasthan. These are now under lease to Metal Corporation of India. The manufacture of pure lead ingots began n 1942-43 in the works of the *Metal Corporation of India.* The Corporation has its mines in Jaipur State in Rajasthan and its smelting plant at Tundoo near Dhanbad. India's requirements of this metal, is about 15 to 18,000 tons per year as against indigenous production of 700 tons. The lead and zinc contents of the raw ore is 12 to 18 p.c. and 8-12 p.c. The production is as follows—1947—189 tons; 1948—625 tons; 1949—593 tons; 1950—627 tons.

Zinc—Deposits are known to exist in Zawar mines in Rajasthan. These are under lease to the Metal Corporation of India.

Tin—With no sufficient deposits being proved anywhere in the country, India as yet depends upon Malaya for her tin supplies. But during the war a de-tinning factory in Bombay was working economically.

Aluminium—This modern industrial non-ferous metal, highly useful for its properties of lightness with corrosion resistance, electrical conductivity, ease of fabrication etc., has shown most remarkable development in India during the war and has very great prospects. Its main raw material, bauxite, is found in India in large quantities in Bombay, M.P., Bihar, Kashmir and other places, the total deposits being estimated above 250 million tons at present. For the present, the production capacities of existing companies in the country is 4,000 tons per annum as against the actual demand of about 16,00 tons. There are now in India only two companies producing aluminiums—the *Indian Aluminium Company* and the *Aluminium Corporation of India.* The first company has its brauxite mines at Lohardaga in Bihar, ore refining plant at Muri, reduction works at Alwaye in Travancore and rolling mills at Belur. The first ingot was produced in March 1943. The second company has its mines at Lohardaga. Its ore-refining plant, reduction works, power house and a rolling mill are located in Jaykaynagar near Asansol. The first ingot was produced in July 1944.

The production of alluminium is as follows:—

1946 ..	.. 3,236 tons	1949 ..	.. 3,490·72 tons
1947 ..	.. 3,215 ,,	1950 ..	.. 3,591 ,,
1948 ..	.. 3,362 ,,		

Secondary Metals, Alloys and Refining of Scrap.—In contrast to virgin or primary metals, *i.e.,* metals extracted from ores, secondary metals result from the use of primary metals and alloys. The secondary metal industry is located mainly in Calcutta and Bombay with fairly important units in Jaipur, Meerut, Mirzapur and Madras. Their main activity is production of brass and gun-metal ingots and white metal alloys.

Of all *yellow metal alloys,* manufacturing of brass, has been in existence in India almost in every part since ancient times, but mostly on a cottage industry scale. The war witnessed the installation of smelting and refining capacity which is more than sufficient to meet India's requirements. The other yellow metal alloys include gun-metal, bronze, bell-metal and phosphor bronze and the country has sufficient productive capacity to meet her total requirements of them to the amount of about 15,000 tons per year. Of the *white metal alloys*, India has a productive capacity of 40,000 tons per year of those in which the white metals are used in varying proportions against the present demand of about 15,000 tons per annum. Similarly, India has also the capacity at present to meet her annual requirement of 7,000 tons of those white metals in which tin is the major element. It may be mentioned here that all these white metals are produced in India by the Eyre Smelting Co., Ltd., a subsidiary of the British firm of the same name, which established its factories in India a decade and a half back.

The *semi-manufactures* industry of the non-ferrous metals, that is to say the production of sheets, circles, strips and rods, with its present productive capacity of 50,000 tons annually was developed mostly during the war except in the case of the Indian Copper Corporation. Although the industry is situated mainly in Calcutta and Bombay, there are several small units scattered throughout the country mosly in Bombay, Punjab, U.P. and Madras.

The *manufactures* include electrical cables etc. and others. As to the latter, consisting of steam and sanitary fittings, building fittings and hollow wire castings, the industry was developed in war time and is now in a position to supply all the present demand in the country. This cannot however be said regarding the former, which may well be divided into two parts, *viz.*, production of black copper rods and manufacture of wires and cables. Before the war only the Indian Cable Company of Tatanagar used to produce wires and cables. Since then the National Insulated Cable Co., Calcutta has taken it up. An associate of the same concern, the National Rolling Mills, Calcutta, alone produces rod.

28. Electrical Industries—have made remarkable progress in India—specially in respect of electric lamps, dry batteries, cells, power transformers, electric motors, electric fans, storage batteries, rubber insulated cables and flexibles. The country is now in a position to produce 23 million electric lamps, 185 million dry battery cells, 270,000 KVA power transformers, 149,500 HP electric motors, 278,000 electric fans, 297,000 storage batteries, 20,000 tons of base copper conductors, 45 million yards of rubber insulated cables and flexibles, etc. A number of these industries are capable of catering largely or wholly to the needs of the domestic market and have besides an exportable surplus.

29. Drugs and Pharmaceutical Industries—The Indian drugs and pharmaceutical industries have made marked progress. India is completely self-sufficient with respect to tinctures, extracts and galenicals. Position regarding synthetic drugs is not satisfactory. This manufacture requires basic chemicals of complicated nature which are not manufactured in India at present. In the field of tablets and injectible drugs, there is a capacity of 88 million tablets per month and 9 million ampules of injectible drugs. India is well-placed in respect of natural drugs of vegetables origin, as the raw materials required are available in the country. Two government factories are in Madras and one in Bengal—have capacity to produce nearly lakh lbs. of quinine per annum. Capacity for producing 15,000 lbs. of strychnine per annum also exists in this country. Caffeine is produced from tea waste by two firms in India. Besides the above drugs of natural origin, opium alkaloids namely morphine, codeine, etc. are being produced at the Government Opium Factory at Gazipur.

As regards drugs of animal origin, there is a capacity to produce annually 23·8 million c.c. of injectible liver extract and 1·4 million lbs. of oral liver extract. A present there are 21 firms producing liver extracts. Shark liver oil which is a good substitute for Cod liver oil is now produced indigenously in large quantities. Hormone products, namely liquid adrenalin and extract pituitary are produced in India in sufficient quantity. Sera and vaccines are produced by a number of firms and also by some government institutions such as Haffkeine Institute, Bombay, King Institute, Quindy and the Central Research Institute, Kasauli. The capacity of private firms is nearly 5 million c.c. per month and that of government institutions about 8 million c.c. India is self-sufficient in respect of many sera and vaccines. Only a few anti-toxins and toxoids are allowed to be imported.

At present Indian factories produce large number of patent medicines. The manufacture and sale of drugs are now controlled under the Drugs Act, 1940 which ensures the quality of indegenous drugs.

30. Chemical Industry (a) *Common Salt* (Sodium Chloride)—is used in India chiefly as food. Its use as an industrial raw material is comparatively small. Main sources of supply are rock salt deposits and sea water; manufacture is mostly along the India sea coast, particularly the Coromandel. Yearly consumption in India at present is estimated at about 450,000 tons. Salt duty was abolished in 1947.

Lime (*Calcium Oxide*)—Reserves of limestone in India are considerable and widely distributed. The production is enough to meet internal requirements. Manufacture is still mostly in country kilns.

Sodium Carbonate (*Soda Ash*)—is consumed in large quantities by glass, soap, ceramics, caustic soda, paper, rubber, metals, bichromates, petroleum refining, pharmaceutical, textile and chemical industries. Raw materials required are sodium chloride, lime stone, coke, coal and ammonia —all available in India. There are now two plants in operation: one at Mithapur and the other at Dhrangadhra. Present total installed capacity is estimated at about 54,000 tons.

Caustic Soda—The manufacture of caustic soda began during the World War II. The important factories are situated in Calcutta, Mettur, Mithapur, Delhi and Ahmedabad. The installed capacity in 1950 was about 18,000 tons.

Hydrochloric Acid—The present annual production is estimated at about 50,000 cwt.

Nitric Acid—The present annual production estimated at about 55,000 cwt., is enough for all home requirements.

Ammonium Sulphate—is the principal fertilizer in India. It is manufactured at six units. Their total rated capacity is about 80,000 tons. The fertilizer factory at Sindhri has a rated capacity of 350,000 tons of ammonium sulphate per year. The consumption of ammonium sulphate averages 280,000 tons per year.

Super-phosphates—are the most widely used fertilizers in the world. There are 14 units in operation. The production for 1950 was 51,708 tons.

Glycerine—is a by-product of the soap industry and is used mostly in the manufacture of pharmaceuticals, cosmetics, explosives and textiles. There are now five units in operation, most of which is situated in Western India. The present installed capacity is estimated at about 3,160 tons.

Coal Distillation Products—are nephthalene, phenol, cresols, benzene and toluene. The production in 1950 amounted to 870 tons—cresole provides a most effective wood preservative. The annual production averages 3,500 tons a year. The production of benzene in 1950 was about 1·33m. gallons. Toluene is used in the manufacture of explosives, pharmaceuticals and dyestuffs. The producing units are at Jaipur and Hirapur. The production in 1950 amounted to 115,000 gallons.

Sulpha drugs—There is no production in India till recently. An Indian concern in collaboration with an American Company has erected a factory for the manufacture of sulpha drugs. The government have decided to undertake production of sulpha drugs.

Anti-Beotics—There is no production yet of either penicillin or streptomycin in India. An agreement ensuring co-operation between the government and WHO and UNICEF in the manufacture of penicillin in India has been completed. The factory is to be set up under the agreement near Dehri Road, Poona District, and will be owned and controlled by the India Government.

Vitamin A—A very rich source is shark liver oil and the oil is being manufactured both by commercial firms and by Fisheries Department of some States.

Vitamins B and D—An Indian company in collaboration with a British concern has recently set up a factory for the production, inter alia, of A and D Vitamins.

Animal Products—Pharmaceutical companies in India now manufacture adrenaline, thyroid and pituitary and liver extracts. Manufacture of liver extracts has developed rapidly since last war. There are 21 units manufacturing liver extracts, oral and injectible. Sera and vaccines are produced by a number of firms and also by some government institutions such as Haffkine Institute, Bombay, King Institute, Madras and the Central Research Institute, Kasauli.

Vegetable Products—About 75 p.c. vegetable drugs mentioned in the British Pharmacopaeia, it is claimed, can be prepared from plants grown in India. *Cinchoma* from which quinine is produced is grown largely in the Darjeeling District and Nilgiris. *Ephedrine* is produced from a species of herb. *Caffeine* is produced from the tea-waste which is available in large quantities. There are now two factories producing Caffeine. *Morphine and Codeine* are opium alkaloids. They are produced at the Government Alkaloid Works at Ghazipur and there is State control over distribution. *Emeline* for amœbic dysentry is produced from Ipecacuanha root. *Strychnine* is produced from Nux Vomica seeds. Nux Vomica is grown chiefly in Orissa. *Santonin* is used chiefly as protection against helminthic infection. It is produced from artemisia which is grown in Kashmir.

INDUSTRIAL PRODUCTION IN INDIA SINCE 1938 *

Finished Steel †

(000 *tons*)

1938	702	1943	947	1947	893
1940	886	1944	934	1948	856
1941	1,000	1945	954	1949	930
1942	923	1946	890	1950	1,005

Cotton Yarn

(*million lbs.*)

1938	1,289	1943	1,685	1947	1,296
1940	1,276	1944	1,643	1948	1,448
1941	1,537	1945	1,644	1949	1,359
1942	1,529	1946	1,367	1950	1,174

Cotton Piece-goods

(*million yds.*)

1938	4,306	1943	4,751	1947	3,762
1940	4,092	1944	4,852	1948	4,319
1941	4,531	1945	4,711	1949	3,904
1942	4,025	1946	3,909	1950	3,665

Jute Manufactures *†

(000 *tons*)

1938	1,266	1943	1,084	1947	1,052
1940	1,234	1944	1,115	1948	1,091
1941	1,194	1945	1,086	1949‡	946
1942	1,278	1946	1,089	1950‡	836

Paper & Paper Boards

(000 *cwts.*)

1938	1,164	1943	1,792	1947	1,862
1940	1,698	1944	1,927	1948	1,958
1941	1,854	1945	1,964	1949	2,064
1942	1,810	1946	2,120	1950	2,178

* Figures from August 1947 relate to the Indian Union.

† Figures relate to Indian Union.

* Figures relate to Indian Union.

‡ Figures from August 1949 refer to production of mills in the membership of the Indian Jute Mills Association.

Sulphuric Acid

(000 *cwts.*)

1938	485	1943	864	1947	1,200
1940	731	1944	804	1948	1,600
1941	874	1945	734	1949	1,989
1942	784	1946	1,200	1950	2,050

Ammonium Sulphate

(000 *tons*)

1938	14·5	1943	21·7	1947	21·3
1940	25·4	1944	23·5	1948	35·2
1941	29·7	1945	22·0	1949	45·9
1942	27·3	1946	22·5	1950	47·3

Paints

(000 *cwts.*)

1938	572	1943	1,105	1947	772
1940	728	1944	1,141	1948	715
1941	1,064	1945	1,030	1949	619
1942	1,055	1946	768	1950	559

Matches

(million gross)

1938	21·6	1943	16·8	1947	23·8
1940	22·8	1944	18·0	1948	26·7
1941	19·2	1945	22·8	1949	26·3
1942	14·4	1946	22·8	1950	26·2

Sugar

(000 *tons*)

1938	994	1943	1,075	1947	901
1940	1,182	1944	1,091	1948	1,095
1941	1,210	1945	967	1949	1,000
1942	886	1946	923	1950	976

Cement

(000 *tons*)

1938	1,404	1943	2,118	1947	1,448
1940	1,712	1944	2,048	1948	1,553
1941	2,083	1945	2,209	1949	2,102
1942	2,188	1946	1,542	1950	2,613

Coal Raisings

(000 *tons*)

1938	28,344	1943	25,518	1947	30,000
1940	29,388	1944	26,040	1948	29,822
1941	29,460	1945	28,716	1949	31,450
1942	29,436	1946	28,885	1950	31,994

Salt

(ooo mds.)

1938	43,968	1943	53,519	1947	51,602
1940	43,093	1944	50,708	1948	63,524
1941	52,087	1945	54,602	1949	55,616
1942	50,120	1946	49,876	1950	71,318

Electricity generation

(Million Kwh.)

1940	2,808	1944	3,828	1948	4,575
1941	3,240	1945	4,116	1949	4,949
1942	3,276	1946	4,892	1950	5,088
1943	3,576	1947	4,073		

Kerosene

(ooo gallons)

1938	38,284	1943	19,894	1947*	13,594
1940	98,413	1944	17,942	1948	11,382
1941	39,553	1945	11,110	1949	11,611
1942	25,484	1946	14,486	1950	..

Source: (1) *Monthly Abstract of Statistics;* (2) *Ministry of Industry and Supply;* (3) *Monthly Survey of Business Conditions published by the Government of India.*

INDIA'S TARIFF POLICY

Historical Background—The origin of tariff in modern times was closely related to the controversy between free trade and protection. The last century as well as the early part the present century was predominated by the Victorian idea of free trade and protection and controlled economy were viewed as derogatory to the principles of economic freedom prevailing at that time. Tariff was then regarded as mere minor weapon in the hands of the state to adjust temporary and small set backs in the terms of the trade. Tariff was imposed on the basis of discriminating protection, the principle of which was to give protection to infant industries. The scope of tariff was limited to particular branches of production, and was directed to ensure developmental protection. Its aim was to 'nurse the bary, feed the child and free the adult.' The Indian Fiscal Commission of 1922 recommended that discrimination should be exercised in the selection of industries for protection so as to ease the burden on the consumer as light as was compatible with the due development of industries. It laid down three well-known principles for granting protection to infant industries and recommended the constitution of a permanent Tariff Board to implement the said policy of selected protection.

When we see it today, we find that the Fiscal Commission of 1922 failed to visualise tariff policy as an instrument of general economic development having regard to the over-all needs of our country. Of course the Fiscal Commission at that time found it difficult to convince a Government, deeply wedded to the principles of free trade, to pursue a course of controlled trade. Protection was not visualised as an instrument of general economic development but was viewed as a means of enabling particular industries to withstand foreign competition, when they applied for protection. Thus fiscal policy resulted in a somewhat lop-sided development. With such an approach it was not possible for basic and key industries to develop. It is also likely that the protection of isolated industries without a positive effort being made at the same time to provide facilities for the establishment of allied industries added to the total burden on the community.

In no other country have such conditions been laid down for the protection of industries on selective basis. It was for the Tariff Board to consider the advantages and disadvantages of protecting an industry in the interest of the national economy and this function should have been left to the Tariff Board without any rigid formulae. One of the omissions on the part of the Government was the failure to appoint a permament Tariff Board with the functions recommended by the Commission. Ad hoc boards were set up and frequent changes made in the personnel. This prevented the taking of long views, the accumulation of experience and the building up of an efficient body of technique and procedure.

Post-war Tariff Trends—Towards the end of 1945, the United States Government circulated for consideration by the nations of the world a document called "Proposals for Expansion of World Trade and Employment". International economic co-operation which had, by then, already taken some concrete form in the establishment of such international bodies as the Food and Agricultural Organisation (FAO), the International Monetary Fund and the International Bank for Reconstruction and Development was sought to be further strengthened by measures dealing with trade barriers and discrimintations. The proposals contained a strong plea for a concerted effort to release trade from the various restrictions imposed on it during the inter-war years with a view to securing the expansion of world trade on a multilateral basis and through it increased employment all over the world. Since this objective required that national policies in respect of international trade and employment should be in line each other, it was proposed that an international trade organisation (ITO) should be set up, through which member nations could promote national and international action to fulfil this purpose.

Following the proposals of the United States Government, conferences on trade and employment at international level were held in London, Geneva and Havana between 1946 and 1948, and the deliberations of these conferences resulted in the following documents:—

(1) General Agreement on Tariffs and Trade (with a Protocol of Provisional Application) and,

(2) the Havana Charter for an International Trade Organisation.

G.A.T.T.—At the instance of the USA, negotiations were initiated at Geneva on April 10, 1947, by 23 countries (including India) sharing among them approximately 70 per cent of the export and import trade of the world for substantial reduction of tariffs and other trade bariers and elimination of preferences on a reciprocal and mutually advantageous basis. These negotiations which ended on October 30, resulted in the framing of the General Agreement on Tariffs and Trade. The Agreement provides for general most-favoured-nation treatment, that is, tariff concession granted to any particular signatory member country by another, would automatically extend to other member countries.

So far as India is concerned, negotiations were conducted with 15 countries, and the concessions exchanged took the form of reduction in customs duties, reduction in preferential margins and binding of existing tariff treatment against future increase. They covered 12 items of export from India and 13 items of import into India. In offering concessions India adhered to three main principles, namely,—

(1) Concessions are to be demonstratively in the interest of national economy, or at least not injurious to it.

(2) They should not relate to products which are protected or which might claim protection during the next three years.

(3) They should not result in excessive loss of revenue.

Some of the provisions of the GATT were initially unacceptable to India. These were substantially modified to suit India's requirements. As a result certain deviations from the principles of most favoured nation treatment are now permissible so that India can maintain her present sanctions against South Africa, and India and Pakistan could grant concessions to each other without extending them to other countries. Similarly although important restrictions could be used for protective purposes only with the prior approval of the contracting parties to the Agreement, it has been provided that such approval would automatically be given whenever the restrictions were designed to protect industries established during the period from 1st January 1939 to 24th March 1948 or are found to be necessary to protect industries engaged in the processing of domestic raw material or of the bye products of domestic industries. Besides, permission was also given to the use of quantitative restrictions on balance of payment grounds.

The Protocol of Provisional Application was signed on behalf of India on 8th June, 1948, and the Agreement (GATT) came into effect provisionally thirty days after, on 9th July, 1948. The Agreement was open to revision or termination after the end of December 1950.

Geneva Agreement—One hundred and twenty-three sets of bilateral negotiations were completed amongst the countries which participated in the negotiations at Geneva. Taken as a whole about two-thirds of the import trade of the countries concerned were covered by the tariff reductions or the binding of existing tariff rates. One important feature of the concessions received and granted was its multilateral application. A concession received or granted through negotiations with any other participating country was to be immediately extended to the other participating countries also. Thus the most favoured nation treatment became in effect multilateral. For example, if India granted to Australia a tariff reduction on a particular article, all other parties to the Agreement were entitled to a similar reduction of duty on the exports of that article to India.

At Geneva India conducted negotiations with the following countries: Australia, Benelux (Belgium, Netherlands and Luxemburg), Brazil, Canada, China, Chile, Cuba, Czechoslavakia, France, New Zealand, Norway, Syria-Lebanon and USA. The nature of the trade between India and Cuba and between India and Syria-Lebanon was such that no basis for any agreement was found. No direct negotiations were made with the UK, Ceylon and Burma. The special character of India's trade with Pakistan was recognised under the Agreement in article XIV, paragraph 5. This provision gives a free hand to the two countries to adjust their customs tariff in relation to each other and to conclude agreements for the supply of essential commodities in the best interests of their mutual trade. The reasons for not holding any direct negotiation with the U.K. and Ceylon was that trade relations between India and these countries were sufficiently covered the Indo-British trade agreement of 1939. For similar reasons it was not found necessary to negotiate with Burma. Three main principles were kept in view in offering concessions, namely, (i) concessions should not result in an excessive loss of revenue.

The broad effect of the agreement at Geneva is that (a) participating nations have agreed to free large areas of bilateral trade for multilateral agreements and to reduce tariffs; and (b) the U.S.A. agreed to help the nations by reducing her tariffs on a range of goods and so give them an opportunity to earn dollars. At the Geneva negotiations, India secured direct concessions on the following principal items of export trade: jute and jute manufactures, cotton manufactures, cashewnuts, mica, shellac, coir mats and mattings, sports goods, carpets, spices and condiments, essential oil and tea.

Indirect Concessions—India also obtained indirect concessions on the following items of exports:—Unmanufactured tobacco, coffee, cotton, non-essential oils, fancy goods, sports requisites, turpentine, tea, raw wool, woollen carpets and rugs, woollen blankets, coir and coir manufactures, wax, gums and resins, kapok, granite and marble, raw hides and skins, leather, canvas shoes and with rubber soles, spices, curry, paste and powder, other condiments, nuts, bristles, pig iron, tanning materials, mica, cotton yarn, cotton floor coverings, certain other varieties of cotton manufactures, jute yarn, jute carpets etc.

Annecy Conference and Agreement—At Annecy it was only the ten new members who negotiated tariff concessions between themselves and with existing members. Even so this meant 147 separate negotiations to reduce or bind tariff rates. In pursuance of the decision taken by the contracting parties at its second session at Geneva in 1948 to invite the countries which showed interest in Havana Charter but were not parties to the GATT, to enter into tariff negotiations for the purpose of their accession to the General Agreement, negotiations were started at Annecy (France), between April 8, 1949 and August 27, 1949 with ten new countries—Denmark, Finland, Greece, Haiti, Italy, Sweden, Dominican Republic, Liberia, Nicaragua and Uruguay. At the end of these negotiations a protocol was drawn up to enable the accession to the General Agreement of these new countries and to implement the results of the tariff negotiations carried out with them. The protocol was signed by all the contracting parties by November 30, 1949 and has come into force with effect from the 20th May 1950. India took part in the negotiations for tariff reductions both at Geneva and Annecy, and has provisionally given effect to the concessions negotiated at Geneva with the effect from 9th March, 1948. At Annecy India conducted negotiations with Denmark, Finland, Greece, Haiti, Italy and Sweden. As India had no significant trade with the other four new countries represented at the Annecy Conference, namely, Dominion Republic, Liberia, Nicaragua and Uruguay, no negotiations were carried out with them, and therefore no direct concessions were either granted to or received from them.

A new pattern of world trade affecting 33 nations with a trade estimated of over 80 p. c.of the world's total was thrashed out in four and a half months of tariff-breaking talks at Annecy between April 8 and August 27, 1949. The American concession includes both reductions of some present barriers and guarantees against the raising of others. They involve about 250 million dollars worth of imports. The imports of all the countries that participated in the Annecy Conference amounted to about 34,000 million dollars out of a world total of 51,000 million dollars in 1948. As a result of Annecy talks, India would get direct concessions on her export trade to the order of Rs. 257 lakhs and she offered concessions to the new countries to the order of Rs. 41 lakhs.

The tariff negotiations at Annecy were conducted on the principles incorporated in Article 17 of the Havana Charter, and no country was required to grant concessions without receiving adequate compensatory concessions in return.

In view of the multilateral character of the agreement, the benefits of the negotiations were generalised in favour of all contracting parties. The negotiations, like those held in Geneva in 1947, were on a selective product by product basis, and no compulsion was involved in offering concessions. The offers made on behalf of India took into account the following principles: (a) Concessions should be in the interests of national economy, or not injurious to national economy; (2) Concessions should not relate to products in respect of which a claim for protection is likely to be made by December 31, 1950 (after this date the concessions to be made could be reviewed), (3) Concessions should not result in an excessive loss of revenue.

The principal commodities in respect of which concessions were offered to India are: tea, shellac, mica, cashew kernels, coirmats and mattings, jute cloth and bags, linseed oil. India on her part, has offered concessions on a representative range of goods, of which the major items are: wood pulp, staple fibre, certain types of textile machinery, ball and roller bearings, certain types of chemicals, figs, sulphur oil.

Torquay Conference—The tariff negotiations which started in September 1950 at Torquay (England) among the countries subscribing to the General Agreement on Tariffs and Trade (GATT) came to an end on 21st April 1951. The conclusion of the tariff talks at Torquay marked the completion of the series of three tariff conferences held since the end of the war, the first two conferences having been held in Geneva and Annecy in 1947 and 1949 respectively. The negotiations were conducted product by product and on a mutually advantageous basis, thus enabling countries to negotiate tariff concessions strictly in accordance with their commercial and trade policies. The tariff concessions agreed to at the Torquay conference would also be made applicable on a multilateral basis upon implementation. Altogether the negotiations involved thirty-eight countries which among them account for over 80 per cent of world imports and exports.

Out of the six new countries which acceded to the GATT, India negotiated only with five—Australia, Western Germany, Peru, Philippines and Turkey. India did not enter into negotiations with South Korea.

Apart from negotiations conducted with the acceding countries, the former contracting parties also discussed among themselves modifications or withdrawals of concessions granted to each other earlier. This was in accordance with the provisions of the GATT permitting contracting parties to negotiate for modifications or withdrawal of concessions after a lapse of three years. Negotiations in this behalf, as also exchange of concessions on fresh items among the contracting parties were therefore scheduled at Torquay in September 1950. It was found that India could not possibly modify her schedule of concessions without serious loss to India of benefits now extended to her products by other contracting parties. The Indian delegation therefore signed the declaration at Torquay, agreeing to continue the tariff concessions granted by India under GATT. But under the relevant provisions of the GATT certain other countries sought modifications or withdrawal of some of the concessions granted by them. India however was only affected when France made requests for withdrawal of certain concessions granted by the latter. India therefore negotiated with France for compensatory tariff concessions. As regards fresh concessions, negotiations in respect of which were permitted under the GATT, India approached Australia, Canada, France, Norway, Syria and Lebanon, USA and Indonesia for concessions for her products. India concluded agreements only with three contracting parties viz., Canada, Denmark and Indonesia.

The principal export commodities in respect of which tariff concessions have been offered to India are jute carpets, woollen shawls and rugs, tea, spices, jute wrapping, yarn waste, coir mats and mattings, jute bags and cloth, vegetable oil, sports goods, shellac, silk or cotton sarees, embroidered garments, sandals for ladies, imitation jewellery, etc. The concessions offered by India in exchange are on milk cream, millet, copper ore, douglas fir, high pressure jointings, paper making amchinery, rice and flour mill, saw mill and wood working machinery.

As a result of the tariff negotiations at Torquay, direct concessions have been obtained by India on her export trade valued for 1948-49 at Rs. 185 lakhs; the value of imports on which India had offered concessions was

Rs. 89 lakhs in the same year. The value of the trade on which India has offered and obtained indirect tariff concessions is estimated at Rs. 377 lakhs and Rs. 513 lakhs respectively.

India along with other countries signed the Final Act at Torquay, extending the life of the schedules to GATT upto 31st December 1953. With the accession of six new countries, the percentage share in the world trade of the GATT countries rose to about 85 per cent.

Tariff Protection—The Government of India on the recommendation of the Tariff Board granted protection to the following industries:—

(1) Lead pencil industry for a period of two years by conversion of existing revenue duties into protective duties.

(2) Protective duty on grinding wheels and segments has been raised by 100% ad valorem from January 1, 1951.

(3) Protection to the button industry and pressure lamp industry has been granted by converting the existing revenue duties into protective duties for a period of 2 years.

(4) Export duty on sacking was raised from Rs. 150 per ton to Rs. 350 per ton to check a rise in the internal prices of sacking (including rope and twine).

(5) Protection for 2 years of artificial silk, fabrics industries and for the pickers industry.

The Government of India have issued their resolutions on the Tariff Board's Reports on the hydroquinone, rubber plantation, milk powder and copper sulphate industry. In the case of the hydroquinone industry, Government have accepted the Board's recommendation that the existing revenue duties should be converted into protective duties at the same rates for two years. Regarding the rubber plantation industry, Government have accepted the main recommendation of the Board that in view of the selling price, protection for indigenous rubber from the competition of foreign rubber does not arise. The Board's finding that no case has been made out for the grant of protection or assistance to the milk powder industry as the indigenous production is negligible in relation to demand, has also been accepted. Finally as regards the copper sulphate industry, Government have accepted the Board's recommendation that, as the fair selling price of indigenous copper sulphate is lower than the landed cost without duty of imported copper sulphate, the industry does not need protection by way of customs duty at present.

Permanent Tariff Board—By Act No. L of 1951, passed on 12th September 1951, a permanent Tariff Commission has been established. The Commission shall consist of not less three, but not exceeding five, whole time members appointed by the Central Government and one of them shall be nominated by the Government to be the chairman of the Commission. Two additional members may be appointed as often as may be necessary for such purpose and period as will be determined by the Government. A member of the Tariff Commission shall hold office for a period of three years and shall be eligible for reappointment.

Functions—The Central Government may refer to the Commission for inquiry and report any matter requiring in its opinion—

(*a*) the grant of protection (whether by the grant of subsidies or the levy of protective duties or in any other suitable form) for the encouragement of any industry in India, including any industry which has not started production but which is likely to do so if granted suitable protection;

(*b*) an increase or decrease in the duties of customs or other duties in relation to any industry for the protection thereof;

(*c*) action to be taken in relation to the dumping of goods in the market occasioned by excessive imports or otherwise;

(*d*) action to be taken where an industry is taking undue advantage of the tariff protection granted to it, particularly with reference to whether the protected industry is—

(*i*) charging unnecessarily high prices for its goods, or (*ii*) acting or omitting to act in a manner which results in high prices being charged to consumers through limitation of quantity, deterioration in quality or inflation of cost production and the like, or (*iii*) acting in restraint of trade to the detriment of the public.

(*e*) further action to be taken in relation to the protection granted to an industry, with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

Principles to be followed by the Tariff Commission: In making a report regarding any matter referred to it for the grant of protection, the Commission shall have due regard to the following principles:

(*i*) the cost of production or manufacture in the representative regions of India of any particular commodity; (*ii*) the cost of production or manufacture in the principal growing, producing or manufacturing centres of foreign countries of the commodity which competes with the commodity produced by the industry claiming protection if the determination of such cost is necessary for the purpose of any case; (*iii*) the approximate cost of import of the commodity; (*iv*) the price which should be deemed to be representative fair selling price; (*v*) Quantity of the commodity required for consumption and the volume of its production and import into India; (*iv*) the probable effect of protection on other industries;

On the basis of its findings on the above matter the Commission shall assess, for the purpose of its report,—(*a*) the relative advantages enjoyed by the industry; (*b*) the nature and extent of foreign competition; (*c*) the possibility of the industry developing sufficiently within a reasonable time to be able to carry on successfully without protection; (*d*) the likely effect of a protective tariff or other form of protection on the interests of the consumer or of industry using the commodity in question, as the case may be; (*e*) the desirability or otherwise of protecting the industry in the public interest.

In recommending the grant of protection to any industry, the Commission may specify the conditions which shall be fulfilled before and after the grant of protection with particular reference ot the following points, namely:—

(*a*) the scale of output, (*b*) the quality of its products; (*c*) the price charged for its products; (*d*) the technological improvements required by the industry; (*e*) the need for research in the process of manufacture; (*f*) the training of officers, technicians and other persons employed in the industry; (*g*) the use in the industry of indigenous products, whether raw or manufactured; (*h*) the time within which an industry, in respect of which protection has been given in advance of production, should start production; (*i*) and any other matter in respect of which the Commission considers it necessary to specify conditions.

The Central Government may also refer to the Commission for inquiry and report any matter relating to (*a*) the effect of protection on the general level of prices in the country, the cost of living of any specified section of the community; the different sectors of the country's economy; (*b*) the effect of tariff concessions under trade or commercial agreements on the development of any specified industry; (*c*) any anomalies that may result from the working of protective or revenue duties (as for example, relationship between the rates of duty on finished goods, partly finished goods and raw materials; (*d*) the prices of particular commodities, whether protected or not.

The Commission may on its own motion inquire into and report to the Central Government on the question of increase of decrease of duties, dumping of goods, industry taking undue advantage by higher prices or otherwise, the effect of protection on the price structure or on the general economy of the country.

Upon receipt of a report made to it by the Commission, the Central Government may take such action as it may think fit.

Fiscal Commission, 1950—The Fiscal Commission, 1950, accepted tariff protection as primarily a means to and as one of the instruments of policy which could be employed for further economic development of the country. Protection of industries should be related to an overall planning of economic development. However, until such a plan was approved protection should continue to be granted on the following principles:—*Firstly*, industries coming under the planned sector should be grouped in the following classes,—(*i*) Defence and other strategic industries, (*ii*) Basic and key industries, and (*iii*) Other industries. Industries falling under group (*i*) should be protected on national considerations whatever the cost be, while in the case of industries coming under group (*ii*), the Tariff Authority should decide the form of protection and the quantum thereof, lay down terms and conditions for the grant of protection or assistance and review from time to time, the extent to which these conditions had been or were being complied with the protected industries. As regards industries in group (*iii*), the criteria to be applied for granting protection should be the economic advantage enjoyed by the industry, its actual or probable cost of production, possibility of its development within a reasonable time and its ability to carry on successfully without protection or assistance and or it should be an industry to which it is desirable in the national interest to grant protection or assistance, the probable cost of such protection or assistance to the community not being excessive. *Secondly*, the claims of the industries which do not come under the approved plan should be considered by the tariff authority in the light of the criteria set out above.

Thirdly, where no approved plan for an industry existed, similar criteria were to be applied for granting protection. The Fiscal Commission held that a single factor such as the local availability of raw materials or the ability of an industry to meet the entire domestic demand should not be regarded as preconditions for the grant of protection.

However, in the Tariff Commission Act, 1951, the recommendations of the Fiscal Commission were accepted in a greatly modified form with changed circumstances.

INDIAN PRESS

The Indian journalism had its first beginning when James Augustus Hicky started his *Bengal Gazette* on January 29, 1780 at Serampore near Calcutta. Since then the story of the progress and development of Indian journalism has been one long history of trials and tribulatins. The growth of Indian newspapers is bound up with the freedom movement of the country. Along with the struggle for freedom carried on by the Indian National Congress, the Indian Press began to voice the national aspiration of the country. With the attainment of freedom, we can now safely say with confidence that Indian newspaper did make no small contribution over more than half a century to the nation's struggle for the achievement of freedom. Working under various limitations, with repressive press laws on all sides, where free expression of opinion and free circulation of news were almost an impossibility, Indian press had always kept the torch of liberty burning amidst encircling gloom of despondency and repression.

With the attainment of freedom, a new era of public responsibility has dawned upon the Indian Press. The obligation to tell the truth, and the duty not to publish incitement to disorder are now the two main responsibilities of the Indian newspapers. The supreme duty of the press now is to educate and mould public opinion in favour of peace and harmony among the various communities in the country.

It is now gratifying to find everywhere new enthusiasm and new spirit in the Indian journalism today.

But the dawn of freedom has also brought other problems to the fore. The best conducted papers in our country have been so long in English. With the acceptance of Hindi as State language, will the supreme position of English papers be assailed? Indian language papers are certainly on the up grade and their circulations are increasing by leaps and bounds with the corresponding increase of advertisement revenue. But still they have their own limitations. Their activities are confined within their provinces and many dialects spoken in a province limit their circulations.

The most notable event in the Indian journalism in 1948 was the formation of the *Press Trust of India Ltd.*—an organisation to take over the supply of news to and from India. The Press Trust is a non-profit-making concern and its membership is open to newspapers in India. As a result of the successful negotiations with Reuters, the Indian Press has gained full control over its own internal news supply.

It is encouraging to note, on the production side, get-up, display, news coverage and other technical details have made progress and can now compare favourably with England and America. Many newspapers are now expanding and modernising their technical equipment. Another interesting development is the distribution of papers by air to centres which could be reached more quickly by plane.

Further important development in the Indian journalism is the growth of chain newspapers. This growth is being viewed with some amount of suspicion rather than with favour. The obvious dangers arising out of the control of a number of newspapers by a person or a group of persons are being discussed by ordinary newspapers readers.

Another happy growth is the movement on the part of journalists to improve their economic and professional conditions through the starting of Journalist Associations and Press Clubs.

It is also gratifying that many features of journalistically advanced countries are being gradually introduced in this country, such as literary typewriting bureaus, literary agents, press-cutting companies and translation bureaus. The scope of free-lance writer has broadened to a considerable extent.

Another important advancement is the establishment of *Indian Audit Bureau of Circulations,* whose creation provides an impartial and authentic agency for auditing and circulation of newspapers as prevalent in U.S.A. and England.

The Press and the New Constitution—The Indian Constitution contains important Articles on the Fundamental Rights of citizens. Foremost among these fundamental rights is the right to "freedom of speech and expression." Unlike American and some other constitutions in which freedom of the press is mentioned in terms as one of the fundamental freedoms of the citizens guaranteed by the constitution, the fundamental rights clause of the Indian Constitution treats freedom of the press as an aspect of the larger "freedom of expression."

Article 269 states that taxes on the sale or purchase of newspapers and on advertisements purchased therein shall be levied and collected by the Government of India but shall be assigned to the States.

Press Laws Enquiry Committee—Government of India set up a Press Law Enquiry Committee under the chairmanship of Sri Ganganath Jha to go into the entire press laws of India for thorough overhauling and modification of Indian Press Laws. The Committee was composed of members nominated from the Central Legislature and three editors recommended by the A.I.N.E.C. Following were the recommendations of the Press Laws Enquiry Committee which was issued in 1948:—

(*a*) an explanation should be added to Sec. 153-A I.P.C. (Promoting enemity between classes) to the effect that it does not amount to an offence under that Section to advocate a change in the social or economic order provided such advocacy does not involve violence, (*b*) Repeal of the Indian States (Protection against disaffection) Act 1922 and Indian States (Protection) Act 1934, (*c*) before taking action against the Press under emergency legislation, Provincial Governments should invariably consult Press Advisory Committee or similar body. (*d*) Retention of the *Indian Press (Emergency powers) Act, 1931* would be an anachronism after the establishment of a democratic State of India. While recommending the repeal of the Act, the Committee suggested that certain provisions of the Act which does not find a place in the ordinary law of the country should be incorporated in that law in suitable places. (*e*) Section 124-A of the I.P.C. relating to sedition should be amended so as to apply only to acts or words which either incite disorder or are intended or tend to incite disorder. (*f*) Sec. 144 Cr. P. C. should not be applied to the press, separate provision should be made if necessary for dealing with the press in urgent cases of apprehended danger, (*g*) necessary provision should be made in the law to empower courts to order the closing down of a press for a specified period in case of repeated violations of law.

The Press (objectionable matter) Act LVI of 1951—This Act will remain in force for two years. When any newspaper contains any "objectionable matter" as defined in the Act, such as to incite or encourage any person to resort to violence or sabotage, to commit murder or any offence involing violence, to interfere with the supply and distribution of food or other essential commodities or essential services or seduce any member of the armed forces of the Union or poliec force from allegiance or his duty or prejudies the recruiting of persons or promote feelings of enemity or hatred between different sections of the people of India, the appropriate authority will have power to demand security from press in certain cases, will have power to forfeit security or demand further security, will have power to demand security from newspapers in certain cases and also power to forfeit security and demand further security. The government will have power to declare certain publications forfeited, will have have power to detain packages containing certain publications when imported, will have power of prohibition of transmission by post of certain documents, will have power to seize and destroy unauthorised newssheets and newshapers, will have power to seize or forfeit undeclared presses producing unauthorised newspapers and unauthorised news sheets.

The Act may be regarded as based on the recommendations of the Press Laws Inquiry Committee.

Empire Press Association —was founded in 1909 for the promotion of the interests of the Newspaper Press of the countries of the British Common Wealth. India is a member of the oversea section of the Association. There are 20 members in the Indian Section.

University Course in Journalism—Several universities of India have taken up the question of teaching of journalism. Madras University the only University in Indian Union which first opened a course of journalism. University of Calcutta has also started journalism class from 1950.

Indian News Agencies—So far as the Indian news is concerned, *Associated Press of India* started by the late Mr. K. C. Roy was the pioneer in the field. Afterwards it became a Reuter-subsidiary company. But in August 1947 Indian and Eastern Newspaper Society and Reuter came to a settlement by which a successor news agency was formed called *Press Trust of India* in place of Associated Press of India which now runs as a national news agency. The Press Trust of India entered Reuter's world-set up as a partner paying for its qualifying shares with a seat on Reuter's Board and a voice in its organisational control. P.T.I. is represented in Reuters by a Trustee and a Director and is a party to the Reuter Trust. P.T.I. is a public non-profit-sharing company.

United Press of India is an important Indian News Agency which was started on September 1, 1933. It has now 20 offices including one each in London. New York, Rangoon, Colombo and large number of subscribers. It has net-work of correspondents all over the country. It has also established teleprinter connection between Delhi-Bombay-Calcutta and other news centres.

Globe News Agency was started in July 1944 in Calcutta. It issues news bulletin in almost in all Indian languages.

Another important news agency is *Dhiman Press of India* started in 1935 which has its head-quarters in Ludhiana. It supplies news, news-photos and features from all over the world to more than a 100 dailies and weeklies in India. Another newly-started news agency is the *Hindustan*

Samachar Ltd., which commenced it work in 1948. Agency now supplies news reports in English, Hindi, Marathi and Gujerati.

Free Press of India was founded in 1923 but was suspended in 1935. The Agency has again commenced business in 1945. But its news service is mainly confined to Free Press group of papers at Bombay.

Foreign Agencies—The foreign News agencies comprise—*Reuters, Associated Press of America, Agence France Presses, Tass News Agency* and *Central News Agency.* Some Foreign News Agencies supply world news to Indian paper and send Indian news to their clients abroad. In addition to those, there are press correspondents for individual papers.

Press & Newspapers Organisations—There are at present main three bodies in India which seek to promote the welfare of Ind. newspapers and better understanding and appreciation of each other's difficulties—(1) *Indian and Eastern Newspaper Society* started in Feb. 1939, the objects of which are as follows: (*a*) to act a central organisation of the Press of India, Burma and Ceylon, (*b*) to promote and safeguard the business interests of members as affected by the action of Legislatures, Governments, the Law Courts, municipal and local bodies and associations or organisations, etc., (*c*) to collect information upon all topics having a practical interest for members and to communicate the same to them, (*d*) to promote co-operation in all matters affecting the common interests of members, (*e*) to hold periodical conferences of its members to discuss and determine action on matters of common interests, (*f*) to make rules to govern the conduct of its members in specified matters, to provide penalties for the infringement thereof, and to provide means of determining whether there has been such infringement, (*g*) to maintain a permanent secretariat in India which should watch over the interests of members and should permit of a constant interchange of information and views (*h*) to do all such other things as may be conducive to the attainment of the aforesaid objects.

(2) *All-India Newspaper Editors' Conference* was started in 1940. Its constitution is as follows: (*a*) to preserve the high traditions and standard of journalism, (*b*) to serve and safeguard the interests of the press in regard to the publication of news and fair comment, (*c*) to secure all facilities and privileges to the press for the due discharge of its responsibilities, (*d*) to represent the press in India in its relations with public and public institutions and particularly in its relations to government, to set up Committees who would act *liaison* between the government and the press as a whole, (*c*) to establish and develop contacts with Associations with similar objects in other countries.

Another Association has also been started known as (3) *Indian Languages Newspapers Association* (established in 1941) for the welfare of newspapers in Indian languages. It is the only organisation in India representing the interests of small newspapers, periodicals and magazines.

Information and Publicity of the Central and State Governments—The Ministry of Information and Broadcasting is a separate department under the control of the Minister of State. Under this Department, are the *Press Information Bureau, the Publications Division, the Films Division and the Advertising Branch,* etc.

There is not only Press Information Bureau under the Information Ministry of the Government of India, but there are also Information Officers attached to each Central ministries, Public Relations Officers, or Press

Attaches attached to Indian Embassies and consular establishment abroad and Public Relations Officers for Railways and other governmental agencies. There are also Information Ministers in the States controlling information departments under Directors of Publicity.

The *Films Division of the Ministry* is the organisation for the production and distribution of documentary and publicity films and news reels. Documentaries and news reels produced by the Division are regularly exhibited in the cinema houses and are shown in rural areas through mobile vans.

Publications Division of the Government of India—The publications Division is responsible for the production, sale, and distribution of popular pamphlets, books, magazines on matters of national importance. The Division of the Government of India produces and distributes two English three Hindi and one Urdu and one Arabic magazine and a large number of pamphlets in English and Hindi on subjects of national importance. The publications of this Division are meant for both internal and external publicity.

Important Indian Newspapers

WEST BENGAL

Dailies

Statesman (*English*): Chowringhee
Advance (*English*): 74, Dharamtola St., Calcutta.
Amrita Bazar Patrika (*English*): 14, Ananda Chatterjee Lane, Cal.
Hindustan Standard (*English*): 3-C, Burman Street, Calcutta.
Ananda Bazar Patrika (*Bengali*): 1, Burman Street, Calcutta.
Basumati (*Bengali*): 166, Bowbazar Street, Calcutta.
Jagriti (*Hindi*): 25, Ezra Mansions, Calcutta.
Jugantar (*Bengali*): 2, Ananda Chatterjee Lane, Calcutta.
Lokmanya (*Hindi*): 160, Harrison Road, Calcutta.
Rozana Hind (*Urdu*): 17, Sagor Dutta Lane, Calcutta.
Desh Darpan (*Punjab*): 82-A, Ashutosh Mukerjee Rd., Calcutta.
Loksevak (*Bengali*): 86-A, Lower Circular Road, Calcutta.
Satya Yug (*Bengali*): 21, Convent Calcutta.
Jana Sevak (*Bengali*): Congress daily organ.
Viswamittra (*Hindi*): 74, Dharmatola Street, Calcutta.

Periodicals

Arani (*Bengali Weekly*): 37-7, Beniatola Lane, Calcutta.
Arthik Jagat (*Bengali Weekly*): 122, Bowbazar Street, Calcutta.
Basumati (*Bengali monthly*): 166, Bowbazar Street, Calcutta.
Bharatvarsa (*Bengali monthly*): 203-1, Cornwallis St., Calcutta.
Prabasi (*Bengali monthly*): Upper Circular Road, Calcutta.
Betar Jagat (*Official Radio Bengali Fortnightly*): 1, Garstin Place, Calcutta.
Sachitra-Bharat (*Bengali weekly*): 110, Lower Circular Road, Cal.
Sanibarer Chitti (*Bengali monthly*): 57, Indra Biswa Road, Calcutta.
Mauchak (*Children's Bengali Monthly*): 14, Bankim Chatterjee St., Calcutta—12.
Modern Review (*English monthly*): Upper Circular Road, Calcutta.
Capital (*English Financial weekly*): 4, Lyons Range, Calcutta.
Desh (*Bengali weekly*): 1, Burman Street, Calcutta.
Dipali (*Bengali weekly*): 123-1, Upper Circular Road, Calcutta.
Indian Finance (*English Financial*

Weekly): 116, Lower Circular Road, Calcutta.
Orient Illustrated Weekly: 93-A, Dharamtola Street, Calcutta.
Hindustan Year-Book (*English Annual*): 14, Bankim Chatterjee St., Calcutta—12.

ASSAM

Dailies

Assam Tribune (*English*): Gauhati.
Dainik Assamiya (Assamese): Gauhati.

Periodicals

Times of Assam (*English weekly*): Dibrugarh.
Janasakti (*Bengali weekly*): Silchar.

BEHAR

Dailies

Indian Nation (*English*): Patna.
Evening News (*English*): Fraser Road, Patna.
Al-Helal (*Urdu*): Patna.
Searchlight (*English*): Patna.
Navarashtra (*Hindi*): *Rajendra Peth*, Patna.
Navin Bharat (*Hindi*): Kadam Kuan, Patna.
Aryavarta (*Hindi*): Patna.

Periodicals

Behar Herald (*English weekly*): Patna.
Janmabhumi (*Hindi weekly*): Patna.
Navashakti (*Hindi weekly*): Patna-Gaya Road, Patna.
Jyotsna (*Hindi monthly*): Patna.
Pravati (*Bengali monthly*): Kadam Kuan, Patna.
Hindustan Review (*English monthly*): Patna.

BOMBAY

Dailies

Times of India (*English*): *Hornby* Road, Bombay.
Advocate of India (*English*): 21, Dalal Street, Fort Bombay.
National Standard (*English*): Sassoon Docks, Colaba, Bombay.
Bombay Chronicle (*English*): Elphinstone Circle, Fort.
Evening News of India (*English*): Hornby Road.
Free Press Journal (*English*): 21, Dalal Street, Fort.
Free Press Bulletin: 2, Dalal Street
Bharat (*English*): 341, Tardeo.
Bombay Sentinel (*English*): Elphinstone Cricle, Fort.
Bombay Samachar (*Guzarati*): Parsi Bazar Street.
Dhyan Prakash (*Marathi*): Deccan Gymkhana, Poona.
Jame-e-Jamshed (*Gujarati*): Mangalore Street, Fort.
Janmabhhomi (*Gujarati*): 138, Medows Street.
Lokamanya (*Marathi*): 136-42 Medows St.
Lokasatta . (*Marathi*): Sassoon Docks, Colaba.
Lokashahi (*Marathi*): Ghoga St. Fort.
Matribhumi (*Gujarati*): 21, Dalal Street, Fort.
Navakal (*Marathi*): 13, Sheniwadi, Girgaon, Bombay.
Nutan Gujarat (*Gujarati*): 136|42, Medows St. Bombay.
Navabharat Times (*Hindi*): Hornby Road.
Navasakti (*Marathi*): 21, Dalal Street, Bombay.
Samyukta Karnataka (*Kannada*): Koppikar Road, Hubli.
Sandesh (*Gujarati*): Ahmedabad.
Sakal (*Marathi*): Poona.
Nava Yug (*Kanarese*): Hubli, Karnatak.
Sansar Samachar (*Sindhi*): 151, Duncan Road.
Vishwamitra (*Hindi*): Noble Chambers, Parsi Bazar Street.
Hindustan (*Gujarati*): 341, Tardeo.
Navabharat (*Marathi*:) 341, Tardeo.
Vande Mataram (*Gujarati*): Frere Road, Fort, Bombay.

Periodicals

Bharat Jyoti (*English weekly*): 21, Dalal Street.

Current (*English weekly*): Old Custom House Rd.

Crossroads (*English weekly*): Gamden.

Atom (*Eng. weekly*): Taj Building, Hornby Road.

March (*English weekly*): Parsi Bazar St. Bombay.

Blitz (*English weekly*): Apollo Street, Fort.

Bombay Chronicle Weekly: Elphinstone Circle, Bombay.

Screen (*Cinema weekly*): Bombay.

India (*English Pictorial weekly*): 6, Tulloch Road, Apollo Bunder, Bombay.

Eve's Weekly (*English*): Taj Building, Hornby Road, Fort.

Indian Reader's Digest (*English monthly*): 215-321, Hornby Rd.

Trend (*Pictorial English weekly*): 165, Wodehouse Road, Bombay.

Commerce (*English Commercial weekly*): Churchgate Street.

Filmindia (*English monthly*): 55, Philrozsah Road.

Forum (*English weekly*): Apollo Street, Fort.

Illustrated Weekly of India: Hornby Road, Bombay.

Karmaveer (*Kannada weekly*): Kappikar Road, Hubli.

Kesari (*Marathi Bi-weekly*): 568, Narayan Peth, Poona.

Pravasi (*Gujarati Weekly*): Medows St., Fort, Bombay.

Janata (*English weekly*): 6, Tulloch Road, Bombay.

Labour Gazette (*English weekly*): Labour Office, Secretariat Fort.

Maharatta (*English weekly*): 568, Narayan Peth, Poona.

Harijan (*English weekly*): Ahmedabad.

Onlooker (*English monthly*): Sir P. M. Road, Fort.

Sunday Standard (*English weekly*): Sasoon Dock, Colaba, Bombay.

MADHYA PRADESH

Dailies

Hitavada (*English*): Wardha Rd., Nagpur.

Nagpur Times (*English*): Nagpur.

Maharashtra (*Marathi*): Nagpur.

Jai Hind (*Hindi*): Gopal Bagh, Jabalpur.

Lokmat (*Hindi*): Nagpur.

Nababharat (*Hindi*): Nagpur.

Tarun Bharat (*Marathi*): Nagpur.

Periodicals

All-India Reporter (*English Law monthly*): Nagpur.

ORISSA

Dailies

New Orissa (*English*): Cuttack.

Eastern Times (*English*): Cuttack.

Dainik Asha (*Oriya*): Cuttack.

Samaj (*Oriya*): Cuttack.

Prajatantra (*Oriya*).

Periodicals

New Orissa (*English monthly*):

DELHI

Dailies

Hindustan Times (*English*): Connaught Circus, New Delhi.

Statesman (*English*): Delhi.

Hindustan Times Evening News (*English*): Connaught Circus.

Hindusthan Standard (*English*).

Daily Pratap (*Urdu*): 19, Punch Kuin Road, New Delhi.

Ind. News Chronicle (*English*): 46, Mori Gate, Delhi.

Milap (*Urdu*): New Delhi.

Watan (*Urdu*): Delhi.

Tej (*Urdu*): Shradhanand Bazar, Delhi.

Periodicals

Caravan (*English monthly*): Connaught Circus, New Delhi.

Eastern Economist (*English weekly*): 52, Queensway, New Delhi.

Indian Listener (*English Radio Fortnightly*): 52, Queensway, New Delhi.

Shama (*Urdu monthly*): Habash Khan Galli, Delhi.

Riyaset (*Urdu weekly*): Delhi.

Janata (*English weekly*): New Delhi.

Shankar's Weekly (*English*): Odeon Buildings, New Delhi.

Thought (*English weekly*): 32, Faiz Bazar, Delhi.

Vigil (*English weekly*): 6, Jantar Mantar Rd., New Delhi.

MADRAS

Dailies

Hindu (*English*): Mount Road, Madras.

Indian Express (*English*): Mount Road, Madras.

Mail (*English*): Mount Rd., Mad.

Indian Republic (*English*): 38, Mount Road, Madras.

Andhra Prava (*Telegu*): Mount Road, Madras.

Andhra Patrika (*Telegu*): 7, Thambu Chetty St., G. T. Madras.

Dhinamani (*Tamil*): Mount Road, Madras.

Bharat Devi (*Tamil*): 2-16, Mount Road, Madras.

Janmabhoomi (*Telegu*): Bezwada.

Dinasari (*Tamil*): Park Town, Madras.

Mathrubhumi (*Malayalam*): Calicut

Swadesamitran (*Tamil*): Mount Road, Madras.

Periodicals

Sport & Pastime (*English weekly*): Mount Road, Madras.

Kaliki (*Tamil weekly*): Kilpauk, Madras.

Ananda Vikatan (*Tamil weekly*): Madras.

Kalaimangal (*Tamil monthly*): Madras.

Andhra Jyoti (*Telegu monthly*): Madras.

Bharati (*Telegu monthly*): 6 & 7, Thumba Chetty Street, Madras.

Indian Review (*English monthly*): Madras.

Sunday Times (*English weekly*): 69, Peter's Road, Madras.

My Magazine (*Fortnightly English*): 32, Broadway, Madras.

UTTAR PRADESH

Dailies

Amrita Bazar Patrika (*English*): Allahabad.

Amrita Patrika (*Hindi*): 15, Elgin Road, Allahabad.

Leader (*English*): Allahabad.

National Herald (*English*): Lucknow.

Pioneer (*English*): 20, Abbot Rd., Lucknow.

Telegraph (*English*): Kanpur.

Pratap (*Hindi*): Kanpur.

Sainik (*Hindi*): Agra.

Sansar (*Hindi*): Banaras.

Aj (*Hindi*): Banaras.

Navajivan (*Hindi*): Lucknow.

Quami-Awaz (*Urdu*): Lucknow.

Bharat (*Hindi*): Leader Building, Allahabad.

Jagaran (*Hindi*): Kanpur and Allahabad.

Swatantra Bharat (*Hindi*): Lucknow.

Periodicals

Hans (*Hindi monthly*): Banaras.

Manorama (*Hindi Monthly*): Allahabad.

Saraswati (*Hindi monthly*): Allahabad.

PUNJAB

Dailies

Tribune (*English*): Ambala Cantt.

Ajit (*Urdu*): Amritsar and Delhi.

Akali Patrika (*Punjab*): Amritsar.

Prabhat (*Urdu*): Jullundar.

PRESS ASSOCIATIONS

Bombay Union of Journalists, Bombay.

Ind. Journalists Association, Cal.

South Indian Journalists' Federation, Madras.

Marathi Journalists Conference, Poona.

U. P. Working Journalist's Federation.

Federation of Indian Working Journalists.
Bihar Journalists Association, Patna.
The Press Club (Reporters' Club). Calcutta.
Foreign Correspondents' Association New Delhi.
Press Association, New Delhi.
Press Owners' Association, Cal.
Press Owners' Association, Bombay.

INFORMATION BUREAUS

Press Information Bureau, Government of India—This Government of India Bureau is responsible for presenting the policies and activities of the Government of India to the public through the Press, for keeping the Government informed of the main trends of public opinion. The Bureau also acts as a liaison between Indian and foreign press correspondents and the government. The Bureau provides news backgrounds, photographs, features and reference services in seven languages—English, Hindi, Urdu, Bengali, Gujerati, Tamil and Marathi—to over 1,800 Indian newspapers. The Bureau maintains close contact with press representatives accredited to the Government of India and representative organizations like Central Press Advisory Committee, the Press Associations and Foreign Correspondents' Associations.

Bureau's photographic library has 34,000 photographs classified under 300 headings. The Bureau's news and photographs are available to the Indian and foreign Press.

The Defence Wing of the Bureau handles publicity for the Armed Forces. It produces two service journals, *Fanji Akhbar,* a weekly and *Jawan,* a bi-weekly in six and eight languages respectively. It also organises daily Forces Programmes and other military broadcasts from AIR.

There are today three Regional offices of the Bureau in Calcutta, Bombay, Madras which handle publicity for the Government of India offices in the area and distribute all the services of the Bureau to the regional newspapers.

Publications Division—This Division of the Government of India in responsible for the production, sale and distribution of popular pamphlets, books, magazines etc., on matters of national importance since independence numerous pamphlets in various languages have been issued by this Division. It also publishes magazines for external publicity.

Advertising Branch—This branch of the Government of India is responsible for the production and release of all display advertisements of the Government of India except the Railways. The media used are the press, posters, folders, calendars, blotters, leaflets, hoardings and cinema slides.

U. N. Information Centre—Theatre Communication Building Queen's Way, New Delhi, disseminates information in the activities of the United Nations to Indian People.

U. S. Information Service—Offices at Delhi, Bombay Calcutta and Madras.

British Information Services ——Offices at Delhi, Bombay, Calcutta and Madras.

INDIAN NEWS AGENCIES

United Press of India.
Press Trust of India.
Free Press Agency.
Dhiman Press of India.

FOREIGN NEWS AGENCIES

Commonwealth—P.T.I.-Reuters.
British—Globe News Agency.
French—Agence France Presse.
U.S.S.R.—Tass News Agency.
U.S.A.—Associated Press of America; United Press of America; Central News Agency.

INDIAN EDUCATION

Introduction of English Education.—The first proposal of founding a University in India was made by Council of Education in Bengal in the year 1845, but was not accepted by the Board of Directors of the East India Company, who considered the scheme somewhat premature. The famous despatch of Sir Charles Wood in 1954, soon after the renewal of Charter of East India Company in the previous year, brought the question once more to the front. "Among many subjects of importance" proclaimed the epoch-making document, "'none have stronger claim to our attention than that of education. It is one of our most sacred duties to the nation, to be the means, as far it lies, of conferring upon the native of India those vast moral and material blessings which flow from the general diffusion of useful knowledge and which India may under Providence derive for her connection with England." In accordance with this declared policy, foundations of university education was laid in the country.

The foundation of university education was laid in this country with the establishment of the Universities of Calcutta, Bombay and Madras in the year 1857, the necessary legislation incorporating them having been passed respectively on January 24th, July 18th and September 15th of the year. Two additional Universities, the University of the Punjab was founded in 1882 and the University of Allahabad in 1887.

The landmark in the history of Indian Universities was the appointment by Lord Curzon of a *University Commission* in the year 1902. The recommendations of the Commission were mainly in the direction of reforms in the constitution of universities. An enactment for amending the law relating to Universities came into effect on 1st September, 1904 and laid new responsibilities upon universities as regards both their control of affiliated colleges and their own teaching functions. It also specified the provision of instruction as one of their duties and gave them the power of appointing professors and lecturers, of holding and managing endowments and of erecting, equipping and maintaining University libraries, laboratories and museums. Though the bulk of the teaching continued to be in the affiliated colleges, a certain amount of higher instruction now began to be concentrated under University management. Territorial limits were assigned to each University. A systematic inspection of colleges by the University was established.

Another important advancement was the *Government of India's Resolution in 1913* which pleaded for the establishment of additional university of teaching type. It reaffirmed the policy of reliance on private effort on secondary education; it recommended an increase in the salaries of teachers and an improvement in the amounts of grants in and insisted on the proper attention being paid to the formation of character in the education given to scholars. It advocated a separate university for each leading province.

Another landmark in the university history is the *Calcutta University Commission* presided over by Sir Michael Sadler (1917-1919). One of the primary recommendations was that universities should be relieved of their intermediate work, so that they may be able to concentrate attention on real university teaching and the advancement of higher learning. The Commission also advocated the establishment of unitary and residential universities.

The Government of India Act 1919 altered the course of educational administration in India. Education became a *transferred* subject under the charge of a minister in governor's provinces, though European education was kept as 'reserved' subject. The education was further decentralised by the Government of India Act of 1935. This policy of decentralisation greatly checked the advancement of education in the country. Hartog Committee severely criticised the reduction of Central Government's responsibility towards education. But from 1937 to 1947 with the revival of certain committees, educational activities of the Government of India were revived. On 1st Sept. 1945, education was separated from Health and Lands and was made a separate Department.

On August 15, 1947 the Education Department became a full-fledged Ministry of Education, but the task bringing education to the masses was the immediate responsibility of the States, the help of the Centre was essential both for maintaining a reasonable uniformity among the States and preserving the national character of such education. The Central Ministry's functions consist mainly in coordination and supervision of the work of the States.

With a view to introducing radical changes in the educational system of India, the Government have made provisions for free and compulsory education, for social education to wipe out illiteracy; for improvement and expansion of technical education; for reorganisation of university education.

Government of India have however retained under their immediate control all education in the Centrally Administered Areas and they also deal with matters concerning universities of Banaras, Aligarh and Delhi.

The Main Programme of the Education Ministry—The first work which the Education Ministry has undertaken is a progamme of basic and social education which has been evolved and put into practice. Top priority has been given to Centre's Scheme of universal, free and compulsory basic education. In almost all the states, basic education has began on an experimental scales.

University Commission's Report—With the advent of Independence, the Government of India appointed the University Commission under the chairmanship of Sir S. Radhakrishan. The Commission issued its report in August, 1949. The recommendations are as follows:—

The entire report is drawn up with one fundamental aim, namely to make education in India completely Indian in character, basis and scope. The Commission recommended the establishment of rural universities with Santineketan and Jamia Millia as their model. The report criticised the allocation of small funds for education which came to only 5 p.c. of the country's total revenue against nearly 12 p.c. in the foreign countries. It urged the need for increasing considerably the grants for scholarships and stipends so that proverty could not be a bar to receiving education. The desirability of limiting the number of students which a collage could admit to about 1,000 or a little more was emphasised.

The Commission also recommended that where the mother-tongue was not the same as the Federal language, the Federal language was to be the medium of instruction from Form I. If the mother-tongue and the Federal language were identical, the students would be required to take any other Indian, classical or modern language. There must be no attempt at hasty replacement of English as a medium of instruction for academic standards. The Commission did not prescribe any time limit. Languages will have to grow and there cannot be any time limit. During the transition, English will remain.

India being a secular state, could not identify itself with any religion and so far as state institutions were concerned, there could be no denominational or sectarian religious considerations.

In regard to co-education, the Commission's recommendation was that in the secondary stages, there should be separation and in the basic and collegiate stages, co-education.

Commission laid considerable stress on improving the standards of the teaching profession.

As for examination, the Commission had recommended the *objective test* which was in vogue in America. This method which did not involve long written examinations and students were not thrown just to trust luck. Hundreds of questions were put to students only one or two required an essay kind of reply. The test involved no gamble or luck.

Teaching Staff—There should be four classes of teachers—*Professors, Readers, Lecturers,* and *Instructors* and promotions from one category to another should be solely on the grounds of merit.

Sergeant Scheme or Basic Education Scheme—This scheme was prepared by Sir John Sergeant, the Educational Adviser to the Government of India. It seeks to introduce universal free and compulsory education for boys and girls between the ages of 6 to 14. The cost of the scheme would be Rs. 200 crores a year.

This "Basic" education will consist of two stages—the *junior* (or Primary) stage covering a period of five years and the *senior* (middle) stage covering three years.

After the primary stage is over, all boys and girls will not be allowed to go on for further education to the high schools. Only those who are expected to profit from further instruction will be allowed to proceed. It is roughly calculated that one out of every 5 will join in the high school. The schools are to be maintained by public funds as far as possible. Similar restrictions would be imposed on the entry of the students to the college. The Intermediate course should be included in the high school course. The colleges would only teach degree courses extending over three years.

Lastly, a national youth movement should be started throughout the country. This movement should teach the youngmen to build up their physique and to serve their country. Employment Bureaus should also be established to find jobs for students after completion of their academic career.

Sergeant & Wadha Schemes—"Basic" education scheme as envisaged, embodies many of the ideas contained in the original Wardha Scheme, though it differs from it in certain important particulars. The main principle of learning through activity as maintained by the Wardha Scheme is supported by the Sergeant Scheme. At the lower stages, the activity will take many forms, leading gradually upto a basic craft or craft suited to local condition, the whole of the curriculum will be harmonised with this general conception. The Sergeant scheme however was unable to endorse the view that education at any stage, and particularly in the lowest stages, can or should be expected to pay for itself through the sale of articles produce by the pupil. Utmost which can be expected is that sales should cover the cost of the additional materials and equipment required for practical work.

Secondary Education—The Committee of the Secondary Education in 1948 recommended (1) after a compulsory 'Junior Basic' course of Five years, there should be a 'Senior Basic' or 'Pre-secondary' course for three years and then a 'secondary course' for four years. The Committee also recommended that before joining the first year of a degree course, the student should undergo a course of education for 12 years. (2) The teaching of federal or natural language should be started at the end of the junior basic stage and should be compulsory throughout the pre-secondary stage but may be optional thereafter. (3) English should be optional, for the student who take up the *'senior basic'* course but compulsory for those who take up the pre-secondary course. (4) There should be one examination at the end of the secondary stage and as far as possible, it should be such as to meet the requirements of the universities, (5) multilateral schools are favoured *i.e.,* schools with varying bias, as far example, agricultural, commercial or technical.

Central Advisory Board of Education—which was abolished in 1923 as a measure of economy was revived by the Government of India in August, 1935. It consists of all State Ministers of Education or their Directors of Public Instruction, Representatives of the Inter-University Board, Indian Parliament nominees of the Government of India. Its main functions are to serve as a clearing house of idea and to act as a distributing centre of educational information for India.

There is also a *Bureau of Education* established in 1915 under the control of the Educational Commissioner with the Government of India. Its main duty is to collect and collate information about education in India and abroad and to arrange for publication of educational reports etc.

Technical Education—*All India Council for Technical Education* was set up by the Government of India on Dec. 2, 1945 to study India's needs for higher technical education. (1) It will survey the present position of technical education in India. (2) Advise on areas where technical colleges are most needed. (3) Consider existing and related projects including the consideration of All-India Technological College.

A decision was taken to establish four Regional Committees to perform the general functions of the Council in different regions and to supervise the work of higher technical institutions which were affiliated to the universities and which might with the approval of the State Government concerned, join the all-India scheme. In accordance with this recommendation, two regional committees of the Council were set up at Bombay and Calcutta to supervise technical education. Another important development in technical education was the establishment of *Indian Institute of Technology at Kharagpur* (W. Bengal).

The Council has also considered a proposal for the establishment of a *National Technical University* to which may be affiliated Higher Technical Institutions, Indian School of Mines & Geology, Dhanbad, the Indian Institute of Science, Bangalore and other institutions of an all India character. A small committee has been set up to examine this plan and evolve a plan for National Technical University.

All India Board of Technical Studies has drafted courses of various branches of engineering, technology and commerce. *All India Board of Technical Studies in Architecture and Regional planning* has drawn up a plan for a typical architectural institution to serve as a model for State Government.

Scientific Manpower Committee—Scientific Manpower Committee appointed by the Government of India in 1947 to assess the country's requirements for scientific and technical manpower for various purposes as well as for suggesting suitable measures for meeting the requirements, submitted its reports in July, 1949. The Committee found that the overall requirements of the country in respect of scientific and technical manpower during the next five year-period are of the order of 54,000 engineers and 20,000 technologists and that available resources of training are hardly sufficient even to meet 50% of the requirements.

Inter-University Board—The need of co-operation in the work of Universities in India was expressed by the Calcutta University Commission. The Indian Universities Conference held at Simla in 1924, passed a resolution unanimously recommending to the Universities that it was desirable that an Inter-University organisation should be established for (1) Bureau of Information, (2) Exchange of Professors, (3) co-ordination of University work. (4) Obtaining recognition for their degrees, diplomas and examinations in other Universities, (5) serving as appointments bureau for Indian Universities, etc.

Physical Education—The Government of India have established an *Advisory Board of Physical Education and Recreation* to draw up a plan of Physical Education for schools and colleges. For the present the Board considered it advisable to concentrate, for the time being, on athletic camps. For this purpose the country is divided into five zones, each zone to have a three-week camp. The object of this is to raise the standard of athletics in schools and colleges and to strengthen the sense of unity in the minds of the youth who would came from different parts of the country and line together.

Education of the Handicapped—A special unit for the education of the handicapped was started in the Ministry of Education in April 1947. The primary function of this unit is to coordinate activities throughout the country and to advise State Governmens on relevant matters. A Braille Printing Press in Dehra Dun with the object of producing Braille literature in Indian languages for the blind is about to be established. With the effect from 1st January, 1950 the Government have established a Training Centre for adult blinds in Dehra Dun. The Government are also planning to start a school for blind children which will cater for all centrally administered areas.

There are 42 institutions for the blind in different parts of the country, most of which are aided by the State governments. There are about 33 institutions for the deaf and dumb in the country. There are only two institutions, one in Bombay and the other in West Bengal for mentally handicapped children. There is only one institution in Bombay which provides facilities for the treatment and teaching of the crippled.

Audio-Visual Education—Institutions in India have begun realising the importance of audio-visual aids to teaching. Radio sets, cinema vans, films etc. are being utilised in connection with Social Education work in the country. Several States have started film libraries for lending films to schools. There is also a film library in the Central Bureau of Education.

Medium of Instruction and Federal Language—The question of medium of instruction in educational institutions especially in schools has always been a controversial point. After the achievement of independence, the State Governments tried to replace English by an Indian language. In a subcontinent like India not only are there many languages but people speaking different languages have settled in the same State. Consequently, in inumerable cases, children with different mother tongues go to the same school. This has made the question of medium of instruction very complicated. The Government of India, therefore, called a Conference of State education ministers to arrive at a tangible decision on this knotty point.

The Conference was held in August, 1949. It was unanimously agreed that the medium of instruction and examination in the Junior Basic (Primary) stage must be the mother tongue of the child and where the mother tongue was different from the regional or State language, arrangements should be made to impart instruction in the mother tongue provided there were not less than 40 pupils speaking the same language in the whole school or 10 such pupils in a class. The regional or State language should, however, be introduced not earlier than Class III and not later than the end of the Junior Basic stage.

The conference also decided that in the Secondary stage, if the number of pupils whose mother tongue was a language other than the regional or State language was sufficient to justify a separate school in an area, the medium of instruction of such a school should be the mother tongue of the pupil. If such schools were organised by private societies they should be entitled to recognition and grants-in-aid from the State Governments. The Government also should provide similar facilities in all Governments, Municipal and District Board schools where one-third of the total number of pupils of a school requested for instruction in their mother tongue. The regional language should be compulsory throughodt the Secondary stage.

As regards the medium of instruction at the university stage, the University Education Commission have recommended that English which is at present the medium in most universities should be replaced as early as practicable by an Indian language. This recommendation of the Commission has been approved by the Government of India and the universities are being informed accordingly.

The Constitution of India has laid down that Hindi in Devnagri script should be the Federal language of the Union and should be developed so that it may become a medium of expression for all the elements of the composite culture of India. For this purpose the Government of India have recently sent a letter to all the State Governments requesting them to make Hindi a compulsory subject in the secondary schools. The University Education Commission have recommended that students at the university stage should be conversant with the Federal Language.

ACTIVITIES OF THE EDUCATION MINISTRY

(1) *Overseas Scholarship Scheme*—The Overseas Scholarship Scheme was started in 1945. The main object of these scholarship is to send students abroad for training in subjects for which facilities are not available in India and also to improve the standard of instruction and research in the country itself.

(2) *Scholarship for scheduled castes and backward tribes* was instituted in 1944-45. Its scope has been widened to include students of Scheduled Castes, Scheduled Tribes and other backward classes.

(3) *Cultural Scholarship*—has been introduced to promote better relations between India and the neighbouring countries and provide whatever facilities are available in India to students of countries which are not so well-equipped in this respect.

(4) *Indian National Commission for the co-operation with UNESCO*—to maintain liasion between UNESCO and various institutions working for the progress of education, science and culture, has been established. This Commission will also serve the Government of India in an advisory capacity in matters relating to UNESCO. Government of India have started a pilot library project in cooperation with UNESCO. The literature received from UNESCO are widely distributed.

(5) *Publications*—some useful and interesting publications have been brought out by the Education Ministry, such as *Archaeology in India, Facilities for advanced studies abroad, etc. History of Philosophy* (*Eastern and Western*) was completed. It is proposed to publish a history of the struggle for freedom in India. The Government of India have appointed a committee for the collection from all possible sources necessary material for the preparation of a history of the Fredom Movement in India.

(6) *Overseas Information Bureau* has been started with three sections, namely information service, publications and library.

(7) *National Archieves* for the preservation of interesting and rare manuscripts.

(8) *All-India Council of Technical Education.*

(9) *Archæology*—the Archæological Department looks after the conservations of ancient monuments in India.

(10) *Indian Council of Cultural Relations*—though a non-official body, it has active support of the Government. It devotes to the strengthening of India's cultural contacts with other Asian countries. The Council will be divided into two sections, one connected with countries of the Middle East and Turkey and other with countries of the Far East, China and Japan.

(11) *Training Institutions*—Following are the training institutions under the Education Ministry—*Central Institute of Education* and *Lady Irwin College.*

(12) *Social Welfare Fellowship*—under the programme of the Social Activities Division of the United Nations' Organisation, fellowships are awarded to Indian candidates to observe social welfare work in overseas.

(13) *National Museum of Art, Archæology and Anthropology* has been started in the Government House, Delhi.

(14) *Central Advisory Committee* was set up for letters, music, arts, dance and drama in March 1951.

(15) For tht study and research of the Indian music, the Ministry of Education with the help of the State Government have set up *National*

Academy of Hindustani Music at Lucknow. This will undertake instructions in the northern style of Indian music and also encourage research and new developments. In co-operation with the Government of Madras, the Ministry has also organised the *Central College of Karnatak Music*. This will be widely representative of all interests in Karnataka music.

(16) *National Art Treasures Fund* was finalised in 1951 with the object of purchasing and securing art treasures of India from India and abroad.

(17) *An Advisory Board of Social Welfare* was set up to sanction grants-in-aid to institutions and associations for social welfare, to nominate representatives on national bodies for social welfare and to serve as liaison between the Government of India and local governments on the one hand and non-official bodies on the other. The Board coordinates social welfare reform initiated by various ministries, State Government and non-official bodies.

(18) *Indian National Commission* has been set up in 1949. This Commission consists of 78 members representing various voluntary associations, state governments etc. Its main programme of work is as follows—(1) To lay down the principles to be followed for preparation of text books so that they promote national solidarity, international understanding and world fellowship (2) to prepare a list of books in Indian languages suitable for translation into foreign languages, (3) to prepare a current list of all translations of books in foreign languages in the field of education, science and culture, (4) to select a list of representative literary works best suited to provide understanding of Indian culture.

(19) On the approval of the Central Advisory Board of Education regarding scientific terminology, a *Board of Scientific Terminology* comprising philologists and scientists were appointed and the Board decided that in all Hindi and other text books written in the Indian languages, international technical terms should be used except where suitable terms were available in the Indian languages. As regards symbols, signs and formulae used in mathematics and other sciences, it was decided that they should be adopted without modification.

CENTRAL EXPENDITURE ON EDUCATION

	Rs.		Rs.
1948-49	6,93,48,457	1949-50 (revised) ..	9,67,06,963
1949-50 (budget) ..	12,12,40,778	1950-51 (budget) ..	11,09,68,262

PROVINCIAL EXPENDITURE ON EDUCATION

	Assam Rs.	*Orissa* Rs.
1945-46	1,03,29,828	63,01,293
1946-47	1,24,50,269	91,54,701
1947-48	1,06,55,120	1,46,06,935
	W. Bengal	*East Punjab*
1945-46	7,86,54,575	5,69,89,555
1946-47	4,47,53,479	2,25,97,466
1947-48	5,59,41,407	2,66,63,188

	Bihar	*U.P.*
1945-46	2,51,73,049	6,01,55,237
1946-47	2,99,11,835	7,10,45,515
1947-48	3,98,91,390	9,05,38,628
	Bombay	*Ajmer*
1945-46	7,23,87,243	19,15,536
1946-47	9,60,10,936	23,51,411
1947-48	12,00,00,773	26,08,588
	C. P. & Berar (Madhya Pradesh)	*Coorg*
1945-46	1,69,13,393	3,67,260
1946-47	2,15,14,407	4,55,372
1947-48	3,21,73,261	4,90,221
	Madras	*Delhi*
1945-46	10,27,02,239	70,63,802
1946-47	12,95,86,139	83,69,293
1947-48	14,49,81,263	98,54,185

STATES EDUCATION BUDGETS, 1951-52

Part A. States	*Total Ed. Budget* (in Lakhs)	*Ed. P. C. of total State budget*	*Expenditure on Ed. per head (Rs.)*
Assam ..	1,70	1·9	16·0
W. Bengal ..	3,47	1·4	8·9
Bihar ..	3,29	0·8	10·6
Bombay ..	11,98	3·3	19·8
M. P. ..	3,20	1·5	15·6
Madras ..	11,39	2·0	17·6
Orissa ..	1,36	0·9	11·8
Punjab ..	1,93	1·5	11·5
U. P. ..	7,37	1·2	12·0
Total ..	45,69	1·6	14·4
Part B. States			
Hyderabad ..	4,83	2·6	14·9
Jammu & Kashmir	49	1·1	10·4
Madhya Bharat ..	1,47	1·9	13·0
Mysore ..	3,09	3·4	21·8
Pepsu ..	67	1·9	13·7
Rajasthan ..	2,59	1·7	16·6
Saurashtra ..	1,13	2·7	14·0
Travancore-Cochin	2,88	3·1	16·7
Total ..	17,15	2·4	15·8
Part C. D. States			
Ajmer ..	29	26·0	4·2
A. & N. Islands ..	2	1·3	5·5
Bhopal ..	16	10·9	2·0
Bilaspur ..	2	14·4	1·6
Coorg ..	7	9·6	3·1
Delhi ..	68	17·4	3·9

Himachal Pradesh	19	10·3	2·0
Kutch	8	8·0	1·4
Manipur	6	14·7	1·1
Tripura	12	12·4	1·8
Vindya Pradesh	46	17·9	1·3
Total	2,15	13·9	2·2
Grand total	64,99	14·8	1·8

MUSEUMS IN INDIA

Indian Museum, Calcutta.
Govt. Industrial Museum, Calcutta.
Victoria Memorial Hall, Calcutta.
Calcutta Commercial Museum, Cal.
Royal Asiatic Society, Calcutta.
Bangiya Sahitya Parisad, Calcutta.
Ashutosh Museum (Cal. Univ.).
Natural History Museum, Darjeeling.
Malda Museum, Malda.
Patna Museum, Patna.
Prov. Museum, Lucknow.
Archæological Museum, Sarnath.
Curzon Museum, Mathura.
Archæological Museum, Jaipur.
State Museum, Udaipur.
State Museum, Baroda.
Rajputana Museum, Ajmere.
State Museum, Hyderabad.
Prince of Wales Museum, Bombay.
Natural History Museum, Bombay.
Central Museum, Nagpur.
Govt. Museum, Madras.
Mysore Govt. Museum, Bangalore.
Archæological Museum, Gwalior.
State Museum, Bikaner.
Rajkot Museum, Rajkot.
Trichur Museum, Trichur.
Nagarjunikonda Museum, Nagarjunikonda.
Taj Museum, Agra.
Provincial Museum, Bhuvaneswar.
Museum of Archæology, Sanchi (Bhopal).
Central Asian Antiquities Museum, New Delhi.
Red Fort Museum, Delhi.
National Museum, New Delhi.
Sardar Museum, Jodhpur.
Archæological Museum, Nalanda.
Trivandrum Museum, Trivandrum.
Khiching Museum, Mayurbhanj.
Prov. Museum, Gauhati.
Municipal Museum, Allahabad.
Bhuri Singh Museum, Chamba.
Faizabad Museum, Faizabad.
Bharat Kala Bhavan, Banaras.
Sri Pratap Singh Museum, Srinagar.
Watson Museum, Rajkot.
Barton Library & Museum, Bhavnagar.

INDIAN UNIVERSITIES

Name	*Vice-Chancellors*
Calcutta (1857)	Mr. Justice S. N. Banerjee.
Bombay (1857)	Mr. N. J. Wadia.
Madras (1852)	Dr. A. Lakshmanaswami Mudaliar.
Allahabad (1886)	Dr. D. R. Bhattacharjee.
Lucknow (1920)	Acharya Jugal Kishore.
Nagpur (1923)	Lt. Col. Pt. Kunjilal Dubey.
Patna (1927)	Dr. K. N. Bahl.
Bihar University (1952)	Sri Shayamnandan Sahay.
Aligarh Muslim (1920)	Dr. Zakir Hussain.
Delhi (1922)	Dr. S. N. Sen.
Agra (1927)	Dr. N. P. Asthana.
Banaras Hindu (1915)	Acharya Narendra Deo.

Andhra (1926)	Dr. V. S. Krishna.
Annamalai, Chidambaram (1929)	R. K. Shanmukham Chetty.
Mysore (1916)	Dr. B. L. Manjunath.
Osmania, Hyderabad (1918)	Nawab Ali Yavar Jung.
Travancore (1938)	Sir Ramaswami Mudaliar.
Utkal University (1943)	Sri Chintamani Acharya.
Kashmir Univ. (1948)	
Univ. of Saugor C.P. (1946)	
Jamia Millia Islamia (Muslim National Univ.), Delhi (1921)	Dr. Zakir Hussain.
Rajputana University, Jaipur (1947)	Dr. G. S. Mahajan.
Ind. Women's University (1902) Poona	Mrs. Sarada Mehta.
University of Gauhati	Sri K. K. Handique.
Bisvabharati (1921)	Rathindranath Tagore.
Madhya Bharat University (Indore) 1948	Dewan Anand Kumar.
Punjab University, Simla (1947)	G. C. Chatterjee.
Karnatak University (1948)	Rai Bahadur C. C. Holkoti.
Baroda University (1949)	Mrs. Hansa Mehta.
Gujarat University (1949)	Sri G. V. Malvankar.
Maharashtra University (1949)	Dr. M. R. Jayakar.
Roorkee University of Engineering, Roorkee (1949)	Prof. C. A. Hart.
Gurukula University, Hardwar	

EDUCATIONAL INSTITUTIONS

AGRICULTURE

Agricultural College, Jhargram (W. Bengal).

Secondary Agricultural School, Chinsurah (W. Bengal)—Courses: over 2 year.

Agricultural Institute, Barrackpur (Bengal)—Three Years' course for matric students.

Bihar Agricultural College, Sabour, Bhagalpur (Bihar)—open to I.Sc. passed students with Chemistry and Physics.

College of Agriculture, Poona (Bombay)—Courses: B.Sc., (Agriculture).

College of Agriculture, Nagpur (M.P.)—Courses: 4 years course for B.Sc. (Agr.) of Nagpur University; also M.Sc. (Agr.); Ph.D. (Agr.) L.Ag. Diploma.

Agricultural College, Bapatla (Madras)—Courses: B.Sc. and M.Sc. (Agr.) of Andhra University.

Agricultural College, Coimbatore (Madras)—Courses: B.Sc. (Agriculture) of the Madras Univ.

Osmania University Agriculture College, Hyderabad (Deccan).

Allahabad Agricultural Institute, Allahabad (U.P.)—Courses: Intermediate in Agriculture, B.Sc. (Agr.); B.Sc. in Agricultural Engineering.

Agricultural College, Kanpur (U.P.)—Courses: Intermediate in Agriculture, B.Sc. and M.Sc. in Agriculture.

Intermediate College in Agriculture, Baraut, Meerut (C.P.).

Agricultural College (Hindu University) Banaras (U. P.)—Courses: B.Sc. (Agr.) & M.Sc. (Agr.).

Indian Council of Agriculture Research, New Delhi—Post-Graduate courses in Agriculture.

Indian Agricultural Research Institute, New Delhi—Post Graduate courses in Agriculture.

Indian Dairy Research Institute, Bangalore, Mysore—Courses: 2 years course for Indian Dairy Diploma open to Matrics.

Indian Veterinary Research Institute, Izzatnagar (U.P.)—Courses for poultry farming, open to those possessing a degree or diploma in Agriculture or Veterinary Science or Dairying, or 1 years' provincial course in poultry husbandary.

Central College of Agriculture—Ananda Parbat, Delhi — Three years' course leading to the B.Sc. (Hons.) Agr. degree of the Delhi Univ., minimum qualifications—(*a*) Higher Secondary Examination of Delhi, (*b*) qualifying exam. of University of Delhi, (*c*) Inter. Science Exam. of a recognised university, (*d*) Admission Exam. of University of Delhi. Age limit is 16 years before the first day of Oct.

ARTS AND CRAFTS

Government College of Arts & Crafts—28, Chowringhee Road, Calcutta.

Indian Society of Oriental Arts, Cal.

Kalavavana, Bisvabharati, Santineketan (Birbhum).

Sir J. J. School of Arts, Bombay.

Kala Bhavan Technical Institute, Baroda, Bombay—It has a fine arts section.

Delhi Polytechnic, Delhi—Five yrs.' course in fine arts, commercial art, modelling, etc.

School of Arts—Jaipur, Rajasthan.

Mysore Government Arts & Crafts Institute, Mysore.

School of Arts, Trivandrum, Travancore.

Government School of Arts and Crafts, Madras.

Government School of Arts and Crafts, Lucknow (U.P.)—Courses include fine arts, industrial arts.

Kala Kshetra—Adyar, Madras.

H. H. the Maharaja's School of Arts, Trivandrum.

ENGINEERING

College of Engineering and Technology, Jadavpur, Calcutta—Civil, Electrical, Mechanical and Chemical Engineering.

Bengal Engineering College, Sibpur.

Calcutta Engineering College, Cal.

Assam Civil Engineering School, Gauhati.

L. D. College of Engineering, Ahmedabad.

B. V. Bhoomradddi College of Engineering and Technology, Hubli.

New Engineering College, Sangli.

Govt. School of Engineering, Kalasia (Ambala).

National Institute of Engineering, Hoshiarpur.

Engineering College, Ludhiana.

Tirhut School of Engineering, Muzaffarpur.

Prem Mahavidyalay Engineering College, Mathura.

Bijay Chand Institute of Engineering & Technology, Burdwan.

Engineernig Institute, Vishnupur.

Bihar Col. of Engineering, Patna.

College of Engineering, Poona.

Government Engineering School, Nagpur.

Orissa School of Engineering, Cuttack.

College of Engineering, Guindy, Madras—Mechanical, Electrical, Highways & Telecommunication.

College of Engineering, Anantapur—Civil, Mechanical and Electrical.

National Institute of Engineering, Mysore.

Faculty of Engineering, Osmania University, Hyderabad.

College of Engineering, Trivandrum.

University of Roorkee, Roorkee.

Punjab Engineering College, Roorkee

Hewett Eng. School, Lucknow.

Engineering College, Dayalbagh, Agra.

College of Engineering, Ahmedabad—B.E. (Civil) and B.E. (Electrical & Mechanical) of Bombay University.

Birla Vishwakarma Mahavidyalaya, Ballav-vidyanagar, Anand—B.E. in Civil, Mech. and Elect. Engineering of the Bombay Univ.

Department of Chemical Technology, University of Bombay—B.Sc. (Tech.) & M.Sc. (Tech.) degree.

Government Engineering College, Jabbalpur.

College of Mechanical & Electrical Engineering, Sindri.

Engineering College, Jodhpur.

B. M. Sreenivasiah College of Engineering, Bangalore 4—Affiliated to Mysore University for B.Sc. courses in Civil, Mechanical and Electrical Engineering, minimum qualification for admission is Inter. Science.

Birla Engineering College, Pilani (Jaipur, Rajasthan)—B.E. degree in Mechanical and Electrical Engineering of the University of Rajputana. B.E. degree course are of four years.

College of Engineering, Bangalore under Mysore University.

College of Engineering, Kakinada, Vizagapatam—Civil, Mechanical & Electrical.

College of Engineering and Technology, Muslim University Aligarh—There are degree, diploma and manual training courses.

Engineering College, Hindu University, Banaras—B.Sc. degree in Mechanical Engineering, Electrical Engineering and Civil Engineering—4 years at the college and one year in practical training outside the college.

MINING AND METALLURGY

Bengal Engineering College, Sibpur—Course: Bachelor of Metallurgy; 3 years course.

Indian School of Mines and Applied Geology, Dhanbad—Courses: (1) Certificate in coal mining, (2) Certificate in Metalliferous Mining, (3) Certificate in Geology, (4) Associateship in Mining Engineering, (5) Associateship in Geology.

Sitarampur Mining School, Sitarampur (Bengal).

Raniganj Mining School, Raniganj (Bengal).

Banaras Hindu University, Department of Mining and Metallurgy—Courses: B.Sc. (mining)—4 yrs.; B.Sc. (Metallurgical Engineering & Fuel Technology)—4 yrs.; open to I.Sc.

FORESTRY

Indian Forest Ranger College, Dehra Dun—Students selected by their respective Governments, are normally admitted, minimum qualification for admission is a pass in the Intermediate exam. with one or more of the following subjects—Mathematics, Physics, Chemistry, Botany, Zoology, or an equivalent subjects. The course is of two years duration.

Indian Forest College, New Forest, Dehra Dun—The College trains selected students by States for superior forest services. The course extends over two years. B.Sc. (honours degree), B.Sc. (Agriculture) or M.Sc. of any class in any Natural Science, Mathematics or Agriculture, provided that the B.Sc. degree is not lower than second class are admitted.

Forest College, Dharwar, Bombay.

Madras Forest College, Coimbatore—Ranger's course for students deputed by Indian Administrations including Indian States. *Officer's Training Course*: two years' course.

LEATHER AND TANNING

Bengal Tanning Institute, Calcutta *A course* certificate in tanning of the Calcutta University, 3 years, open to I.Scs., *B course* certificate in tanning 2 years, *C course* certificate in boot and shoe and leather goods manufacture.

Government Leather Working School Bandra.
Government Tanning Institute, Bombay.
Government Tanning Institute, Jullundur—Two years' course.
Leather Working School, Agra—Diploma in boot and shoe making —two years' course.
Government Tanning School, Fatehpur, (U.P.).
Municipal Board Leather Working School, Allahabad.
Institute of Leather Technology, Madras.
Municipal Board Leather Working School, Agra.
Govt. Leather Working School, Meerut, U.P.—two years course.
Govt. Leather Working School, Kanpur, U.P.—2 years' course.

TEXTILE

Govt. Weaving Institute, Gauhati.
Bengal Textile Institute, Serampore.
Silk Institute, Nathnagar, Bhagalpur.
Textile Technical School, Parel, Bombay.
Govt. Weaving Institute, Gauhati.
Govt. Institute of Dyeing and Calico Printing, Ludhiana.
Punjab Institute of Textile Technology, Amritsar.
Technological Institute of Textiles, Bhiwani, (Punjab).
Govt. Hosiery Institute, Ludhiana.
Bengal Silk Technological Institute, Berhampur (W. Bengal).

TECHNICAL INSTITUTIONS

Bengal Ceramic Institute, Calcutta.
Eastern Higher Technical Institute, Calcutta.
Air Technical Training Institute, Dum Dum.
College of Aeronautical Services, Dum Dum.
Cal. Technical School, Calcutta.
Moberly Technical School, Hooghly.
B.P.C. Technical School, Krishnagore.
Ordnance Technical School, Ishapur.
Kanchrapara Technical School, Kanchrapara.
West Bengal Survey Institution, Bandel.
B.N.R. Apprentice Training School, Kharagpur.
Jamshedpur Technical Institute, Jamshedpur.
Jamalpur Technical School, E.I.R., Jamalpur.
Balasore Technical School, Balasore.
Prince of Wales Technical School, Jorhat.
Victoria Jubilee Technical Institute, Bombay.
Shivaji Technical Institute, Kolhapur.
I. C. Technical Institute, Ahmedabad.
F. S. Parekh Technical Institute, Surat.
S. N. Parukh Parsi Polytechnical Institute, Surat.
Morvi Technical Institute, Morvi.
Abdulla Fazalbhoy Technical Institute, Bombay.
Victoria Jubilee Municipal School, Poona.
Kalabhavan Technical Institute, Baroda.
Luxminarayan Institute of Technology, Nagpur.
Govt. Technical School, Raipur.
H.B. Technological Institute, Kanpur
College of Technology, Hindu University, Banaras.
Indian Institute of Sugar Technology, Kanpur.
Govt. Technical Institute, Lucknow.
Govt. Technical Institute, Gorakhpur
Govt. Technical Institute, Jhansi.
Govt. Polytechnic, Tehri (Garhwal)
Technical College, Dayalbagh, Agra.
Govt. Technical Institute, Ambala.
Delhi Polytechnic, Delhi.
Govt. College of Technology, Coimbatore.

Alagappa Chettiar College of Technology, Madras.
Jaypur Vikramdeo College of Science & Technology, Waltair.
Tamilnad Polytechnic, Mathurai.
Govt. School of Technology, Madras
Kerala Polytechnic, Calicut.
Central Polytechnic, Madras.
Andhra Polytechnic, Kakinada.
Sri Chamarajendra Technical Institute, Mysore.
Osmania Technical College, Hyderabad.

COMMERCIAL INSTITUTIONS

Govt. Commercial Institute, Calcutta
George Telegraph Training Institute, Calcutta.
Calcutta Commercial Institute, Cal.
Ghose & Mitter's Business Institute, Calcutta.
R. A. Podar College of Commerce & Economics, Bombay.
Sydenham College of Commerce, Bombay.
G. S. College of Commerce & Economics, Jubbulpur.
C. S. College of Commerce & Economics, Nagpur.
Govindram Saksaria College of Commerce, Wardah.
Central School of Commerce, Saifabad, Hyderabad.
Govt. Commercial Institute, Ernakulam.

RADIO

School of Radio Physics and Electronics, Poona.
Radio Electric Institute, Bombay.
Institute of Radio Technology, Dadar, Bombay.
Radio School, Poona.
Wireless School, Nasik.
Radio Engineering Institute, Poona.
College of Wireless & Commerce, Calcutta.

LEARNED SOCIETIES

Agri-Horticultural Society of Madras—Madras.
Andhra Historical Research Society—Rajamundry.
Anthropological Society of Bombay, 136 Apollo St. Bombay.
Banaras Mathematical Society—22, Senpura, Banaras.
Bhandarkar Oriental Research Institute—Poona.
Bharata Itihasa Samshodaka Mandala—312-313, Sadasiv Peth, Poona.
Bihar Research Society—Museum Buildings, Patna.
Bombay Art Society—6, Rampant Row, Fort, Bombay.
Bombay Historical Society—Exchange Building, Bombay.
Bombay Medical Union—French Bridge, Chowpatty, Bombay.
Bombay Natural History Society—114, Apollo Street, Bombay.
Cal. Mathematical Society—92, Upper Circular Road, Calcutta.
Ind. Chemical Society—92, Upper Circular Road, Calcutta.
Ind. Library Association—4, Chittaranjan Avenue, Calcutta.
Ind. Mathematical Society—Fergusson College Building, Poona.
Ind. Music Association—Lucknow.
Ind. Research Fund Association—Hutments, Civil, Block No. 36, New Delhi.
Ind. Society of Oriental Art—11, Wellington Sq., Calcutta.
Ind. Science Congress Association—1, Park Street, Calcutta.
Ind. Research Society—78, Serpentine Lane, Calcutta.
Indian Academy of Science—Bangalore.
Indian Statistical Institute—Calcutta.
Indian Institute of Philosophy—Amalner, East Khandesh.
Indian Philosophical Congress, University of Delhi—Delhi.
Indian Historical Records Commission—Queensway, New Dehlii.
Ind. Society of Agricultural Economics—46-48, Esplanade Mansion, Bombay.

Iran League—Navasari Building, Hornby Road, Bombay.
Kakatiya Samachika—Rajamundry.
Mahabodhi Society—Bankim Chatterjee Street, Calcutta.
Royal Asiatic Society, Bom. Branch—Town Hall, Bombay.
Royal Asiatic Society of Bengal—1, Park Street, Calcutta.
Society for the Promotion of Zoroastrian Knowledge—Malabar Hill, Bombay.
National Academy of Science—Allahabad.
K. R. Cama Oriental Institute—136, Apollo Street, Fort Bombay.
All India Oriental Conference—Poona 4.
Islamic Research Association, Town Hall—Bombay 1.
Haffkine Institute, Bombay.
Biochemical Standardisation Laboratory, Calcutta.
Entomological Society of India, Kanpur.
Imperial Council of Agricultural Research, New Delhi.
Ind. Jute Mills Association Research Institute, Calcutta.
Textile Industry's Research Association, Ahmedabad.
Council of Scientific and Industrial Research, New Delhi.
Ind. Association for the Cultivation of Science, Calcutta.
Nutrition Research Laboratory, Coonoor.
Bose Research Institute, Calcutta.
Central Irrigation Research Institute, Poona.
Forest Research Institute, Dehra Dun.
Ind. Diary Research Institute, Bangalore.
Imperial Institute of Sugar Technology, Kanpur.
River Research Institute, Barrackpur.
Tata Institute of Fundamental Research, Bombay.
Vishveshvaranand and Vedic Research Institute—Hoshiapur, East Punjab.
Zoroastrian Association—16, Elphinstone Circle, Fort, Bombay.

INDIAN NATIONAL CONGRESS

The Object —The object of the Indian National Congress is the well-being and advancement of the people of India and the establishment in India by peaceful and legitimate means of a Co-operative Commonwealth based on equality of opportunity and of political, economic and social right and aiming at world peace and fellowship.

Flag —The flag of the Indian National Congress shall consist of three horizontal colours—Saffron, White and Green with the picture of a Charka in blue in the centre. It shall be made on hand-spun and hand-woven Khadi.

Constituents—The Indian National Congress will include the *Annual Sessions of the Congress* and—

(*i*) Gram and Mohalla Congress Committees: one such committee shall be constituted for every village or mohalla or for a group of villages or mohallas, with a population of not less than 500,

(*ii*) District Congress Committees and one class of Intermediate Congress Committees, between the District Congress Committees and the gram or mohalla Congress Committees, to be determined by the Pradesh Congress Committee concerned,

(*iii*) Pradesh Congress Committees,

(*iv*) All India Congress Committee,

(*v*) The Working Committee and

(*vi*) Organisations or Associations created, affiliated approved by A.I.C.C. or the Working Committee.

Membership —(1) any person of the age of 18 years and over who accepts Article 1, on making a written declaration to that effect in Form A, and on payment of an annual fee of a rupee, shall become a *primary member* of the Congress, (2) A primary member shall become an active (*Kriyashil*) member if he fulfils the following conditions and signs a declaration in Form B.—(*a*) He is of the age of 21, (*b*) He is a habitual wearer of hand-sun and hand-woven Khadi, (3) He is a teetotaller, (4) He believes in equality of opportunity and status for all, irrespective of race, caste, creed or sex. (5) He does not observe or recognise untouchability in any shape, (6) He is a believer in inter-communal unity and has respect for the faith of others. (7) He devotes regularly a part of his time to some form of national, community or social service, otherwise for personal profit or to some constructive activity, as laid down from time to time by the Congress.

Provided that he is not a member of any political party, communal or other which has separate membership, constitution and programme and provided that he has been a primary member for two years consequtively.

Territorial Divisions

The Pradesh Congress Committees shall ordinarily be constituted in the Pradeshes named below:—

Pradesh	*H.Q.*	*Pradesh*	*H.Q.*
Ajmar	Ajmer	Maharashtra	Poona
Andhra	Vijayawada	Mysore	Bangalore
Assam	Gauhati	Nagpur	Nagpur
Biihar	Patna	Pepsu	Patiala
Bombay	Bombay	Punjab	Jullundur
Guzerat	Ahmedabad	Rajasthan	Jaipur
Delhi	Delhi	Tamilnad	Madras
Himachal Pradesh	Simla	Utkal	Cuttack
Hyderabad	Hyderabad	Uttar Pradesh	Lucknow
Karnatak	Hubli	Vidharva (Berar)	Akola
Kerala	Quilon	Vidhya Pradesh	Rewa
Madhya Bharat	Indore	West Bengal	Calcutta
Mahakoshal	Jabalpur		

All India Congress Committee—The delegates of every Pradesh shall assemble in a meeting to elect among themselves one-eighth of their number as representatives of the Pradesh on the A.I.C.C.

The President of the Congress, members of the A.I.C.C. elected, the ex-presidents of the Congress and representatives of the organisations and associations affiliated, shall constitute the A.I.C.C. President of the Congress shall be the President of A.I.C.C.

Congress Session —The session of the Congress shall be ordinarily held annually at the time and place decided upon by A.I.C.C. or Working Committee. A *special session* of the Congress shall be held in case the A.I.C.C. so decides or a majority of P.C.C.'s by their resolutions, request the President of the Congress to convene such a special session.

Parliamentary Board —The Working Committee shall set up a Parliamentary Board consisting of the President and five other members with the Congress President as its Chairman for the purpose of regulating and co-ordinating parliamentary activities of the Congress Legislature parties.

Working Committee —shall consist of the President of the Congress and twenty members, including a Treasurer and one or more general secretaries, who shall be appointed by the President, Working Committee shall be the highest executive authority of the Congress and as such shall have the power to carry into effect the policy and programme laid down by the Congress, and by A.I.C.C. and shall be responsible to A.I.C.C.

CONGRESS DATES

1885—Establishment of the Congress in 1885 by A. O. Hume and first session in Bombay on 28th December, 1885; **1906**—Dadabhai Naoroji, in his presidential address at Calcutta proclaimed *Swaraj* or Self- Government as in the colonies as the goal of the Congress; **1907**—Split in the ranks of the Congress at Surat when the annual session was wrecked; **1919**—Moderates separated from Congress finally; **1920**—Mahatma Gandhi joined Congress and it passed under his control; first civil disobedience movement started on March 19, 1920; **1921**—Four anna membership of the Congress was first introduced; **1923**—First entry of a strong Congress party in the Central Legislature (Swaraj Party) for wrecking the reforms; **1927**—At the annual session, Congress declared the goal of Indian people was complete national independence; **1928**—Congress agreed to accept Dominion Status if granted before the end of 1929; **1929**—In fulfilment of its provious resolution Congress at Lahore passed Complete Independence or *Purna Swaraj* resolution; Congress institutes 26th Jan. 1930 an annual *Independence Day* to be observed for the first time on the 26th January; **1930**—Civil Disobedience movement started by the Congress for Government's failure to accede to Congress demand; **1931**—C. D. movement suspended on the conclusion of Gandhi-Irwin Pact when Congress agreed to join Second Round Table Conference with Mahatma Gandhi as sole representative; **1932**—Congress activities suppressed by the Government and the organization declared unlawful; **1934**—Congress withdrew Civil Disobedience movement; **1935**—Congress celebrated Golden Jubilee in December; **1937**—Congress started parliamentary activities under Government of India Act and swept the polls at general elections held all over India and Congress ministries formed in seven out of 11 provinces; first village Congress at Faizpur; **1939**—Congress ministers tendered resignations as Congress would not support Britain in the imperialistic world war; First Presidential election contest between Subhas Bose and P. Sitaramaiyya in which Subhas Bose won; **1940**—Congress rejected Viceroy's August offer of the expansion of Viceroy's Executive Council and for drawing up of a new constitution after the end of war as it was wholly opposed not only to principle of democracy but also to the best interest of India; **1940**—Congress starts anti-war individual Civil Disobedence movement restricted to limited number of Congressmen; **1942**—Congress rejected Sir Stafford Cripp's offer of Dominion Status; All-India Congress Committee passed *'Quit India'* resolution at Bombay on 8th August, 1942; and the Government launched full repressive measures against the Congress by the wholesale arrests of its leaders and the Congress organisation was banned throughout most of British India; **1944**—Mahatma Gandhi and member of Congress Working Committee released; **1945**—Fresh plan for an interim Government proposed by British Government through Lord Wavell, was accepted by the Congress, but it broke down at Simla Conference due to insistence of the Muslim League of Congress-League parity: **1946**—British Cabinet Mission's proposal regarding Indian independence.—Interim Government formed at the Centre by the Congress; **1947**—British transfers power tó India to the Congress on 15th August, 1947; Division of India into India and Pakistan; **1948**—First session of the Congress in an Indian State (Jaipur).

CONGRESS OFFICE-BEARERS

President—Sri Jawaharlal Nehru.
Gen. Secretaries—Sri Lal Bahadur Shastri and U. Srinivasa Mallayya.
Treasurer—Sri Moraji Desai.

WORKING COMMITTEE OF THE CONGRESS

Sri Jawaharlal Nehru
Sri Purshotamdas Tandon
Sri Kamaraj Nadar
Maulana Abul Kalam Azad
Pandit Govindballabh Pant
Sri Moraji Desai
Sri Shankar Rao Deo
Sri Neelam Sanjiva Reddi
Sri Nabakrishna Chaudhury
Sardar Pratap Singh Kairon
Sri B. S. Hirey
Sri Gulzarilal Nanda
Sri Manikyalal Varma
Sri V. I. Muniswamy Pilay
Lal Bahadur Shastri
Sri U. Srinivasa Mallayya

INDIAN CENSUS, 1951

The decennial census of India with March 1, 1951 as its reference date was carried out by some 600,000 enumerators during the first ten days of March 1951. The *questionnaire* covered following information: (1) number in household, (2) sex, (3) age, (4) marital status, (5) birthplace, (6) citizenship or nationality, (7) mother tongue, (8) literacy and educational qualifications, (9) economic status, (10) urban or rural domicile and (11) household or family structure. Economic information sought for the first time included such questions as whether a person was self-supporting, an earning dependent, or a non-earning dependent, whether he or she were an employer, employee or independent worker and the type of work performed, but no details of income were required. The size, composition and internal structure of the family households were also sought for the first time in order to assist the government both in its economic planning and its measures of social reform. On the other hand, no information was sought in respect of caste and communal distinctions (as had been required in earliar censuses) except to the extent necessary for constitutional purposes, though information was recorded in respect of Scheduled Castes, Scheduled Tribes, other backward classes and Anglo-Indians. Census included all parts of India as set forth in the constitution except Jammu and Kashmir in view of the special conditions in that territory and the Part B Tribal Areas of Assam which had not been included in any former census. The Himalayan State of Sikkim, was however included as in former enumerations.

MAIN SUMMARY

India's total population of 361·82 millions is the second highest in the world, China leading with a population of 463·50 millions.

India's population constitutes 15·1 per cent of the total world population as against China's 19·4.

The population of India including an estimated population of 4·37 million of Jammu and Kashmir and an estimated population of 56 lakhs of Part 'B' Tribal areas of Assam would stand at 361·82 millions.

The displaced persons' total is 7,479,287. Statewise Punjab has the highest population of displaced persons, West Bengal closely follows.

The increase population in 1951 over 1941 is 42·06 millions reflecting 13·4 p.c. increase.

The total land area covered by the census is 1,138,814 sq. miles excluding Jammu and Kashmir and Part 'B' Tribal areas of Assam.

Total population of Part 'A' States is 278·89 millions, of Part 'B' States as 67·83 millions, Part 'C' States as 9·99 million and of Part 'D' States as 1·66 lakhs.

India has a population of 296 persons per square mile. Density of population in respect of some other countries are—China 123; Soviet Russia 23; U.S.A. 50; Japan 579; Indonesia 108; Pakistan 210; Germany 506; U.K. 536; Brazil 15; Italy 396 and France 193.

One feature of the Indian census figures is the disparity in the male-female ratio. Over the whole of India there is an excess of males. The ratio varies in different parts of the country. The female population of India as a whole in 1951 is exactly 10 millions less than that of the males.

The census of 1941 showed a total of 389 million, and increase of 50 million or 15 p.c. over 1931 figure. The 1951 census has shown a similar increase. The population of the Indian Union today was 362 million. This represented an increase of 13·4 p.c. over the population in 1941. The population has increased by some 43 million in the last decade.

Significant fact about Indian birth rate is not that it is one of the highest in the world, but it has shown no signs of declining during the last 50 years.

The problem of population in India is not the rate of increase, but the net addition to the existing population in every decade.

STATES

In Bombay State as a whole, there is 929 females for every 1000 males.

Female population outnumbers the male population in Madras State. For every 1,000 males there are 1004 females

Of all the States of India, it is in Delhi that the female population is the lowest, being 761 for every 1000 males.

Percentage of increase in population between 1941 and 1951 among the States is greatest in Delhi where it is 90 per cent and least in the Punjab where it is 0·4 p.c.

As regards general population, Uttar Pradesh has got the highest number with a total of 63·25 millions. Next comes Madras with 56·95 millions. Bihar follows with a population of 40·21 millions.

In respect of area, Madhya Pradesh is the largest state with a land area of 130·32 thousand sq. miles. Next comes Rajasthan with a land area of 128·42 thousand sq miles. Madras comes next with an area of 127·76 thousand sq. miles and Bombay follows with an area of 115·57 thousand sq. miles. Uttar Pradesh has an area of 112·52 thousand sq. miles.

The lowest increase of population is in the Punjab which is 0·4 p.c. between 1941-51 and the highest increase is in Delhi which is 90 p.c.

CITIES

India's 75 cities with a population of 1,00,000 and over contain 24,085,169 as compared to 16,748,552 in 1941. This clearly indicates a shift in the population from rural to urban areas.

The population of these 75 cities of India with one lakh or over, indicates that nearly 7 p.c. of the country's total of 356,891,624 people crowd in these cities.

In cities, specially in industrial ones, males preponderate over females. The number of females per thousand males in Calcutta is 571, in Bombay 597, in Kanpur 700, in Ahmedabad 764, and in New Delhi 680, Rajahmundry on the other hand in Madras has 1,022 women for 1,000 men.

Only three cities in India have recorded reduction in population. These are Amritsar—18 p.c.; Bikaner—7·7 p.c., Shahjahanpur—5 p.c.

States having cities with a population of 1,00,000 or over are as follows—Bombay—8 cities, U.P.—16 cities, Bengal—6 cities, Madras 4 cities, Bihar—5 cities Punjab, Madhya Bharat, Mysore, Rajasthan, Saurashtra—3 cities each, Madhya Pradesh and Travancore Cochin—2 cities each; Ajmer and Manipur—1 city each.

States of Bhopal, Bilaspur, Coorg, Himachal Pradesh, Kutch, Tripura and Vindya Pradesh have no cities with a population of more than a lakh.

Besides New Delhi which has shown a very high rate of increase of 197·7 p.c., Tollyganj (a suburb of Calcutta) has an increase of 156·9 p.c., Dehra Dun 153 p.c., Rajkot 152 p.c., Allepey 105·8 p.c., Ranchi 98 p.c., Bangalore 90 p.c., Vijayawada 86·6 p.c. and Madras 83·9 p.c. Bombay 63·1 p.c., and Calcutta with 20·9 p.c.

Greater Calcutta, Howrah and suburbs all together main the most urban area in the country with a total population of 3,490,281, Bombay comes second with 2,840,011, Madras third with 1,429,985, Delhi and New Delhi together fourth with 1,93,697.

MISCELLANEOUS

The total land area covered by the census is 1,138,841 sq. miles. It includes all Parts A, B and C States and Part D territories of India according to the Constitution, with the exception of the following:—

(*a*) Owing to special conditions prevailing there, the census was not taken in the Part B State of Jammu and Kashmir (82,250 sq. miles);

(*b*) The Part B Tribal Areas of Assam (which had not been included in any former census) are not included in the present census.

Sikkim was always included in former censuses and has been included in the present census also.

All persons who were alive at sunrise on the 1st of March, 1951 and were present within the territories specified above (including territorial waters) have been included in the count, with the exception of:—

(*a*) Non-Indian nationals who are members of the staff of Diplomatic and Consular missions in India, of Foreign and Commonwealth countries; and stationed in Delhi, Bombay, Calcutta and Madras; and members of the families of the above personnel;

(*b*) Non-Indian nationals on non-Indian war ships lying in Indian ports.

As a general rule, every person has been enumerated at his normal place of residence, subject to the following exceptions:—

(*a*) persons who were away from their normal place of residence throughout the period from sunrise on the 9th February, 1951 to sunrise on the 1st March, 1951, have been enumerated at the places where they were first found by an enumerator during the enumeration period or within three day thereafter; and

(*b*) persons without any place of residence have been enumerated at the place where they were found by an enumerator on the night preceding 1st March, 1951.

The result of the count is as follows:—

Persons—356,891,624; Males—183,384,807; Females—173,506,817.

Note I.—These figures are subject to correction in the light of detailed scrutiny of census records. It is not, however, anticipated that any material variation will be found ncessary. Final and complete results will be published in this year.

Note II.—The population of Jammu and Kashmir was estimated at 4·37 millions, as on 1-3-1950 under the *Constitution (Determination of Population) Order*, 1950, vide Notification of the Ministry of Home Affairs No. 2|12'50-Public dated the 17th April, 1950. A local estimatism (unverified) of the population of Part B Tribal Areas is 0·56 millions. The population of India, including these two figures is 361·82 millions.

[*It is to be noted here that Census figures of the States published in the following pages do not exactly correspond with the figures in the Tables printed which were only provisional. This is due to the fact that corrected figures have been supplied to us by the respective State Census authorities*].

The following figures relate to the territories covered by the 1951 census:

Year	*Population (in millions)*	*Increase (in millions)*	*Percentage Increase*
1951	356·89	42·06	+13·4
1941	314·83	39·31	+14·3
1931	275·52	27·34	+11·0
1921	248·18	0·87	— 0·3
1911	249·05	13·55	+ 5·8
1901	235·50	..	..

During the twenty years (1931-51), the number added to the population was three times as many as during the ten years (1921-31) and twice as many as during the thirty years (1901-31).

Provisional totals of the count of displaced persons have also been separately reported. The total number is 7,479,278.*

---

* The reported provisional totals (which relate to sunrise on 1st March 1951) are inclusive of children born to displaced persons after their arrival in India, in Uttar Pradesh, Madhya Pradesh, Assam, Orissa, Madras, Vindhya Pradesh, parts of West Bengal and Bihar. They do not include such children elsewhere

CENSUS OF INDIA : 1951

PROVISIONAL TOTALS—GENERAL POPULATION

Name of State	*Land Area in square miles*	POPULATION				*Females per 1000 of males*		*Percentage Variation Increase (+) Decrease (—)*		
		1951			*1941*	*1941*	*1951*	*1941-51*	*1931-41*	*1921-31*
		Persons	*Males*	*Females*	*Persons*					
1	2	3	4	5	6	7	8	9	10	11
PART A STATES										
1. Assam*	54,084	9,129,442	4,869,878	4,259,564	7,593,037	889	875	+20·2	+19·6	+19·3
2. Bihar ..	70,368	40,218,916	20,172,567	20,046,349	36,545,575	994	994	+10·1	+12·3	+11·6
3. Bombay	115,570	35,943,559	18,631,883	17,311,676	29,506,968	935	929	+21·8	+16·0	+13·2
4. Madhya Pradesh	130,323	21,327,898	10,688,811	10,639,087	19,631,615	996	995	+ 8·6	+10·3	+12·7
5. Madras	127,768	56,952,332	28,413,661	28,538,671	49,847,508	1,010	1,004	+14·3	+11·6	+10·0
6. Orissa ..	59,869	14,644,293	7,240,008	7,404,285	13,767,988	1,053	1,023	+ 6·4	+10·2	+11·9
7. Punjab	37,428	12,638,611	6,780,770	5,857,841	12,593,628	853	863	+ 0·4	+17·9	+ 9·9
8. Uttar Pradesh	112,523	63,254,118	33,142,457	30,111,661	56,156,622	907	909	+11·9	+13·6	+ 6·7
9. West Bengal	29,476	24,786,683	13,319,941	11,466,742	21,837,295	845	861	+13·5	+23·7	+ 7·7
Total Part A States*	737,409	278,895,852	143,259,976	135,635,876	247,840,236	948	947	+12·6	+14·0	+10·2
PART B STATES										
1. Hyderabad	82,313	18,652,964	9,464,495	9,188,469	16,338,534	957	971	+14·2	+13·2	+15·8
2. Jammu & Kashmir*										
3. Madhya Bharat	46,710	7,941,642	4,128,308	3,813,334	7,151,502	912	924	+11·1	+13·7	+11·9
4. Mysore	29,458	9,071,678	4,663,858	4,407,820	7,329,149	948	945	+23·8	+11·7	+ 9·7

CENSUS OF INDIA: 1951

PROVISIONAL TOTALS—GENERAL POPULATION

Name of State	*Land Area in square miles*	POPULATION				Females per 1,000 of males		Percentage Variation Increase (+) Decrease (—)		
		1951			*1941*	*1941*	*1951*	*1941-51*	*1931-41*	*1921-31*
		Persons	*Males*	*Females*	*Persons*					
1	2	3	4	5	6	7	8	9	10	11
5. PEPSU	10,099	3,468,631	1,873,205	1,595,426	3,424,060	834	852	+ 1·3	+17·5	+ 8·2
6. Rajasthan	128,424	15,297,979	7,966,208	7,331,771	13,282,105	905	920	+15·2	+18·4	+14·7
7. Saurashtra	21,061	4,136,005	2,094,968	2,041,037	3,430,892	965	974	+20·5	+12·1	+13·3
8. Travancore-Cochin	9,155	9,265,157	4,615,335	4,649,822	7,492,893	1,002	1,007	+23·6	+18·9	+26·3
Total Part B. States*	327,221	67,834,056	34,806,377	33,027,679	58,449,126	937	919	+16·1	+15·1	+14·8
PART C STATES										
1. Ajmer	2,425	692,506	359,572	332,934	588,960	903	926	+17·5	+15·7	+13·3
2. Bhopal	6,921	838,107	438,778	399,329	785,322	915	910	+ 6·8	+ 8·2	+ 5·8
3. Bilaspur	453	127,566	65,332	62,234	110,336	930	953	+16·4	+10·0	0·0
4. Coorg	1,593	229,255	125,333	103,922	168,726	826	829	+35·5	+ 6·3	0·0
5. Delhi	574	1,743,992	990,443	753,549	917,939	716	761	+90·0	+43·8	+30·6
6. Himachal Pradesh	10,600	989,437	516,317	473,120	935,359	891	916	+ 5·8	+11·9	+ 7·7
7. Kutch	8,461	567,825	273,363	294,462	500,800	1,096	1,077	+13·4	— 2·6	+ 6·3
8. Manipur	8,620	579,058	284,747	294,311	512,069	1,056	1,034	+13·1	+13·3	+26·7
9. Tripura	4,049	649,930	339,962	309,968	513,010	886	912	+26·7	+34·2	+18·4
10. Vindhya Pradesh	24,600	3,577,431	1,834,610	1,742,821	3,353,019	962	950	+ 6·7	+13·3	+ 9·0
Total Part C. States	68,296	9,995,107	5,228,457	4,766,650	8,385,540	921	912	+19·2	+15·3	+11·0

CENSUS OF INDIA: 1951

PROVISIONAL TOTALS—GENERAL POPULATION

Name of State	Land Area in square miles	POPULATION				Females per 1000 of males		Percentage Variation Increase (+) Decrease (—)		
		1951			1941	1941	1951	1921-31	1931-41	1941-51
		Persons	Males	Females	Persons					
1	2	3	4	5	6	7	8	9	10	11
PART D TERRITORIES AND OTHER AREAS										
1. Andaman & Nicobar Islands	3,143	30,963	19,036	11,927	33,768	571	627	— 8·3	+17·2	+ 7·4
2. Sikkim	2,745	135,646	70,961	64,685	121,520	921	912	+11·5	+10·9	+34·1
Total	5,888	166,609	89,997	76,612	155,288	832	851	+ 7·3	+16·2	+24·6
Grand Total*	1,138,814	356,891,624	183,384,807	173,506,817	314,830,190	945	946	+13·4	+14·3	+11·0

* Figures for the State of Jammu and Kashmir, and Part B Tribal Areas of Assam *not included.*

Note 1—Jammu & Kashmir. Due to special conditions prevailing there, 1951 Census Operations were not carried out. The area of the State is 82,258 square miles. 1941 Census population is 4·02 millions. The population strength was determined under the Constitution (Determination of Population) Order, 1950, as 4·37 millions on 1-3-1950

Note 2—Part B Tribal Areas of Assam. Census Operations were never so far carried out there. A local estimate (unverified) indicates a population strength of 560,631 persons.

STATE POPULATIONS, 1951

Population figures of the States marked with asterisks* are the latest revised figures supplied to us by the State census authorities, hence do not tally with the Provisional Census Tables on pages 385-387 issued by the Census Commissioner of India, just after enumeration.

ASSAM*

Area (*Sq. miles*) ..	54,084	Urban ..	407,468
Population ..	9,043,707	Increase over 1941 census ..	+19·1
Males ..	4,812,166		
Females ..	4,231,541	Females per 1000 males ..	875
Rural ..	8,636,239		

WEST BENGAL*

Area (*Sq. miles*) ..	29,476	Females per 1000 males ..	860·8
Population ..	24,786,683	P. C. of females to male population ..	46·27
Rural ..	18,645,399	Number of Towns in West Bengal ..	114
p.c. of rural pop. to total population ..	75·2		
Urban ..	11,444,06		
p.c. of urban pop. to total population ..	24·8		

Calcutta Proper

Population ..	25,49,790	Females per 100 males ..	525·14
Males ..	16,22,615	Density per sq. miles ..	77,263
Females ..	92,71,75		
P. C. of males ..	65·56		
P. C. of females ..	34·44		

BIHAR*

Area (*Sq. miles*) ..	70,368	Increase over 1941 census ..	+10·1
Population ..	40,225,947	Females per 1000 males ..	990
Males ..	20,223,675	Density per sq. miles ..	572
Females ..	20,002,272		

BOMBAY*

Area (*Sq. miles*) ..	111,433·8	Urban ..	11,170,325
Population ..	35,955,143	Increase over 1941 census ..	+21·8
Males ..	18,614,262	Females per 1000 males	929
Females ..	17,340,881		
Rural ..	24,784,818		

Population of Bombay Natural Divisions

Bombay-Gujrat ..	11,395,706	Konkon Division ..	4,656,877
Southern Deccan ..	4,698,555	Greater Bombay ..	2,839,270
Northern Deccan ..	12,368,735		

MADHYA PRADESH

Area (*Sq. miles*) ..	130,323	Increase over 1941 census	+8·6
Population ..	21,327,898	Females per 1000 males ..	995
Males ..	10,688,811		
Females ..	10,639,087		

MADRAS*

Area (*Sq. miles*) ..	127,790	Increase over 1941 census	+14·3
Population ..	56,952,332	Females per 1000 males ..	1,004
Males ..	28,413,661	Literates ..	12,065,716
Females ..	28,538,671		

ORISSA*

Area (*Sq. miles*) ..	60,135·9	Increase over 1941 census ..	+6·38
Population ..	14,645,646	Females per 1000 males ..	1,023
Males ..	7,242,892	Literacy ..	15·79
Females ..	7,403,054	Displaced persons ..	20,039
Rural ..	14,051,876		
Urban ..	594,070		

PUNJAB*

Area (*Sq. miles*) ..	37,377·9	Increase over 1941 census	+0·4
Population ..	12,637,965	Females per 1000 males	863
Rural	10,34,9497		
Urban	22,88,468		

UTTAR PRADESH*

Area (*Sq. miles*) ..	112,523	Rural	5,46,42,387
Population ..	63,280,255	Increase over 1941 census	+11·9
Males	33,155,039	Females per 1000 males	909
Females	30,125,216	Density per sq. mile	558
Urban	86,37,868		

MADHYA BHARAT*

Area (*Sq. miles*) ..	46,477	Increase over 1941 census	+11·1
Population	7,954,154	Females per 1000 males	914
Males	4,133,075	Rural	6,512,923
Females	3,821,079	Urban	1,441,231

RAJASTHAN

Area (*Sq. miles*) ..	128,424	Increase over 1941 census	+15·2
Population	15,297,979	Females per 1000 males	920
Males	7,966,208		
Females	7,331,771		

SAURASHTRA*

Area (*Sq. miles*) ..	21,451·1	Increase over 1941 Census	+20·5
Population	4,137,359	Females per 1000 males	965
Males	2,094,442	Towns	85
Females	2,042,917	Villages	4,352
Rural	2,744,198		
Urban	1,393,161		

Population according to religion:—

Hindus	35,87,884	Muslims	4,22,186
Sikhs	881	Christians	1,813
Jains	1,23,916	Jews	69
Buddhists	13	Others	37
Zorastrians	560		

PEPSU*

Area (*Sq. miles*)	10,078·1	Increase over 1941	
Population	34,93,685	census	+1·3
Rural	28,28,175	Females per 1000 males	965
Urban	6,65,510	Literacy	11·46

Population according to religion:—

Hindus	17,04,349	Jains	7,578
Sikhs	17,21,935	Buddhists	219
Muslims	55,913	Zorastrians	98
Christian	3,565	Jews	9

HYDERABAD*

Area (*Sq. miles*)	82,313	Increase over 1941	
Population	1,86,65,253	census	+14·24
Males	94,87,744	Females per 1000 males	957
Females	91,77,509	Density per sq. miles	226

MYSORE*

Area (*Sq. miles*)	29,458	Increase over 1941	
Population	9,071,678	census	23·6
Males	4,663,858	Females per 1000 miles	945
Females	4,407,820	Density per sq. mile	308
		Literacy	20·6

TRAVANCORE-COCHIN*

Area (*Sq. miles*)	9143·9	Increase over	
Population	9,280,425	1941 census	21·22
Males	4,620,803	Females per	
Females	4,659,622	1000 males	1008
Rural	7,792,133	Density per sq. mile	1014
Urban	1,488,292		

Population by Districts:—

Trivandram	2,154,192	Kottayam	1,783,771
Quilon	3,026,822	Trichur	2,315,640

DELHI*

Area (*Sq. miles*)	577·6	Increase over	
Population	1,744,072	1941 census	+90·6
Rural	306,938	Females per	
Urban	1,437,134	1000 males	716

AJMER*

Area (*Sq. miles*)	2,425	Increase over	
Population	69,33,72	1941 census	+17·5
Males	36,02,36	Females per	
Females	33,31,36	1000 males	926

COORG

Area (*Sq. miles*)	1,593		
Population	229,255	Increase over 1941 census	+35·5
Males	125,333		
Females	103,922	Females per 1000 males	826

BHOPAL

Area (*Sq. miles*)	6,921		
Population	838,107	Increase over 1941 census	+6·8
Males	438,778		
Females	399,329	Females per 1000 males	915

BILASPUR

Area (*Sq. miles*)	452·7		
Population	12,60,99	Increase over 1941 census	+16·4
Males	64,738		
Females	61,361	Females per 1000 males	953
Rural	12,23,54	Literacy	5·5
Urban	3,745		

Population according to religion:—

Hindus	12,43,93	Muslims	1,394
Sikhs	307	Christians	5

HIMACHAL PRADESH*

Area (*Sq. miles*)	10,451·2		
Population	98,33,67	Increase over 1941 census	+5·8
Rural	94,19,66		
Urban	41,401	Females per 1000 males	916
		Literacy	7·98

Population according to religion:—

Hindus	96,44,48	Christians	312
Sikhs	4,712	Jains	34
Muslims	13,859	Buddhists	2

VINDYA PRADESH*

Area (*Sq. miles*)	24,600	Rural	32,68,780
Population	35,74,690	Increase over 1941 census	+6·61
Males	18,32,940	Density per sq. mile	151
Females	17,41,750	Females per 1000 males	950
Urban	3,05,910		

CUTCH*

Area (*Sq. miles*)	8,514		
Population	567,606	Increase over 1941 census	+13·4
Males	272,977		
Females	294,629	Females per 1000 males	1,077
Rural	453,852	Towns	10
Urban	113,754	Villages	965

Population according to religion:—

Hindus	393,128	Muslims	11,14,34
Sikhs	478	Christians	117
Jains	62,397	Jews	3
Joroastrians	49		

MANIPUR*

Area (*Sq. miles*) ..	8,620	Urban ..	131,470
Population ..	577,635	Increase over 1941 census ..	12·8
Males ..	283,685		
Females ..	293,950	Females per 1000 males ..	1,034
Rural ..	446,165		

TRIPURA*

Area (*Sq. miles*) ..	4,049	Urban ..	42,595
Population ..	639,029	Increase over 1941 census ..	24·6
Males ..	335,589		
Females ..	303,440	Females per 1000 males ..	912
Rural ..	596,434		

ANDAMAN & NICOBAR ISLANDS

Area (*Sq. miles*) ..	3,143	Decrease over 1941 census ..	— 8·3
Population ..	30,963		
Males ..	19,036	Females per 1000 males ..	627
Females ..	11,927		

SIKKIM

Area (*Sq. miles*) ..	2,745	Increase over 1941 census ..	+11·5
Population ..	135,646		
Males ..	70,961	Females per 1000 males ..	912
Females ..	64,685		

POPULATION OF CITIES

Greater Calcutta ..	3,490,281	Allahabad	3,33,362
Greater Bombay ..	2,839,270	Agra	3,75,994
Madras ..	1,429,985	Meerut	2,40,860
Delhi (Old and New)	1,744,072	Cuttack	1,02,505
Hyderabad ..	1,085,074	Howrah	4,43,207
Kanpur ..	7,04,536	Bangalore	7,76,170
Banaras	3,57,175	Mysore City ..	2,44,334
Lucknow	4,97,594	Trivandrum ..	1,86,941

INDIAN TRADE AND COMMERCE

Peculiarity of Indian Trade—The continental nature of India's geography, with her vast coastal area, the big and navigable rivers in the interior and the difficult mountain passes in the north—to the west as well as to the east has from time immemorial governed India's trade with the east, west and the north. Seaborne trade has therefore been the most important, although the difficulty of transport along the hazardous trade routes in the north has never been a barrier to overland trade. The growth of railway transport heading towards the seaports has however greatly facilitated sea-borne trade, not of course wholly beneficial in effect in the absence of an eye to India's national welfare. The partition of the country has by its nature largely increased the overland trade. The contents of India's trade with foreign countries has however been changing in comparatively recent years with the growth of modern power-driven industry, not so violently of course as it did change with the coming of the British power to authority. Here again the partition of the country is again greatly shaking the volume and direction of India's total trade, as well as its composition.

Post-war Trends of India's Foreign Trade—Important changes have occurred in the pattern of India's foreign trade as a result of the last war and the subsequent independence and partition. The pattern which has emerged in the last few years suggests that some of these changes are likely to become permanent. The increased industrialisation has brought about a substantial change in the composition of India's foreign trade; the percentage of imports of raw materials to total imports has increased and that of exports of raw materials has declined. This change has been accelerated as a result of partition. Another closely allied change is the relative decline in the imports of manufactured articles and the relative increase in their exports. Significant changes have also occurred in the direction of trade. There has been a relative increase in our trade with the U.S.A., Australia and other Far Eastern countries, while the percentage share of the U.K. has shown some decline. Perhaps the most significant change has been in respect of our balance of trade: the traditional surplus balance in our trade has now become adverse, although there has been a substantial improvement in the position in 1950.

The changes in the structure of Indian trade mentioned above have been reflected in our trade with the U.K. and other Commonwealth countries. Before the war, the Commonwealth countries as a whole constituted the largest market for Indian exports, as well as the largest source of Indian imports. In 1948 and 1949, they still constituted the largest market for Indian exports, taking about half of the total value, but accounted for less than half of total imports. However, although with the gradual diversification of Indian trade the share of the U.K. has fallen to some extent both as regards exports and imports, the U.K. is still India's largest overseas market and source of supply, taking nearly one-fourth of total exports and accounting for about one-third of imports.

In the composition of exports, the proportion of three main groups, namely food, raw materials and manufactures, to the value of total export of Indian merchandise which were 21 p.c., 23 p.c. and 55 p.c. respectively in 1948-49 came to be 23 p.c., 20 p.c. and 55 p.c. in 1950-51. As regards import, the proportion of food, raw materials and manufactures to total trade was 21 p.c., 24 p.c. and 55 p.c. in 1948-49 and 20 p.c., 33 p.c. and 46 p.c. respectively in 1950-51.

Direction of Trade—As regards direction of trade, while exports to both U.K. and U.S.A. have increased, imports therefrom have declined in the former case and improved in the latter. Besides to these two countries, we are sending more goods in value to Canada, Australia, Switzerland, Germany, Italy, Belgium, Netherlands, Sweden, East Africa, Iran, Ceylon, Burma, Malaya, Japan and Aden. Similarly, we are taking more from the U.S.A., Canada, Australia, France, Germany, Belgium, Netherlands, Egypt, East Africa, Iran, Ceylon, Malaya, Japan, Sudan and Portuguese East Africa. The chief declines on the import side are from the U.K., Switzerland, Italy, Sweden, Pakistan and Burma.

Departments of Commerce & Industry Ministry—Of the various departments and offices of the Ministry of Commerce and Industry the following can be mentioned:—

(*a*) The office of the *Chief Controller of Imports* deals mainly with the administration of control over imports in general and of various articles in particular, according to the policy of the Government and the Ministry.

(*b*) Similarly the main functions of ¦ht offices of the *Chief Controller of Exports* relate to administration of control over the export trade, the chief among which are—to review the Export Control Notification from time to time, make proposals for relaxation and tightening of controls of various commodities, to direct export of more important commodities with a view to maintaining India's old markets on the one hand and the need of earning hard currencies and finding new markets on the other, to fix quota percentages, overall or destinational, with regard to specific commodities, and to see that the issue of export licences is done in a fair and equitable manner.

(*c*) The office of *Commercial Intelligence and Statistics,* located at Calcutta, advises the Government on all commercial matters, acts as an intermediary between the Government of India in the Ministry of Commerce and commercial public, and collects, compiles and disseminates commercial information and statistics.

(*d*) The offices of the *Mercantile Marine Department,* at Calcutta and Bombay, are concerned with the administration of the Merchant Shipping Acts and rules at the ports.

(*e*) The *Directorate General of Shipping,* set up in 1949 with headquarters at Bombay, deals with all matters affecting merchant shipping and initiates proposals for the consideration of the Government or examine matters referred to it by the Government.

(*f*) The *Office of the Registrar of Trade Marks* deals with the administration of the Trade Marks Act and registers trade marks throughout India.

(*g*) The *Indian Tariff Commission* examines the claims of industries to protection or assistance and submits its reports to the Government for decision. Its objects are to enquire into the cost of production of various commodities, determine their fair selling prices, recommend measures to counteract dumping from abroad and report on the effects of combinations, monopolies, trusts etc., on the production and prices of protected industries, suggesting ways and means of preventing such practices.

(*h*) The main function of the *Department of Insurance* is to administer the operation of the Insurance Act of 1938 as well as of the insurers.

(*i*) *Director-General of Commercial Intelligence and Statistics* is responsible for the compilation and publication of statistical information regarding trade and commercial intelligence.

(*j*) *Economic Adviser and Statistician* study all available economic and statistical information and do research work on specific economic problems, supply to the Government economic and statistical information and advise the Government in regard to the country's economic welfare.

(*k*) *Administrative Intelligence Branch* collects and collates official statistics of all the ministries of Government of India, presents data in graphic and pictorial forms, interprets the statistics collected and informs the respective ministries of noteworthy trends.

Import and Export Control—In the interests of trade and economy of India, the Government of India exercises control over import and export control under the *Import and Export Control Act of 1947*. This is specially important for the future of Indian industries and resources as well as for the accumulation and conservation of foreign exchange in a period of difficult balance of payments position of the country. While export control is of permanent importance in the interest of the country, relatively speaking import control is a more temporary expedient, called for by the need of heavy food imports, the allocation of exchange resources in different currencies for different items of import in the interests of industrialisation, disinflation and supply of essential requirements. The devaluation of the rupee in relation to the dollar has however made the task of import trade control in relation to the dollar areas a matter of more or less grave importance. This control is exercised by the Ministry of Commerce according to the advice of the *Import Advisory Council*. Import policies are reviewed from time to time according to exchange position and need of imports. Policy decisions are carried into effect by the Import Trade Controller and the staff under him at the various ports. For the purpose of import trade control all commodities are classified under following groups—(*a*) goods under Open General Licence for import from soft currency countries, (*b*) goods which are licensed freely from dollar areas, (*c*) goods which are licensed freely from soft currency countries, (*d*) goods for which no licences are granted from any source, (*e*) goods for which no licences are granted from dollar or hard currency countries, (*f*) goods for which import licences are granted within overall monetary limits from dollar and hard currency countries, and (*g*) goods which are licensed within overall monetary limits from soft currency countries.

The control over the export trade is also exercised by the Government under *Import and Export* (*Control*) *Act of 1947*. An Export Advisory Council has also been constituted to advise Government on the working of the export control policy. Tht articles controlled are grouped into 4 parts. *Part A* includes commodities the supply position of which is very tight, for which therefore no export licences are as a general rule granted at all. *Part B* includes commodities controlled by the Ministry of Food, commercial exports of foodgrains, pulses, flour, vegetable products, fodder, bran, pollard etc., being prohibited. Under *Part C* comes articles controlled by the Ministry of Industry and Supply, licences being issued by that very Ministry. Under *Part D* are included commodities controlled by the Ministry of Commerce. All these parts are reviewed from time to time.

Government of India's Trade Policy—The chief features of the commercial policy of the Government are promotion of foreign trade, operation of trade controls, application of fiscal policy as an instrument of economic development, maintenance of trade services and functions abroad and the development of India shipping:

So far as (*A*) *the promotion of foreign trade* is concerned, the government have adopted the following variety of methods—(1) conclusion of bilateral agreements with a number of countries. Biliteral trade agreements are intended to establish direct contacts, secure essential and scarce goods not otherwise obtainable and promote export of Indian goods. (2) commercial service abroad which has been greatly expanded. This service pushes Indian goods and keeps in close touch with foreign markets. For the same purpose India participates in a number of international fairs and exhibitions. Exhibitions of Indian goods are also organised by the Government through their trade representatives in different parts of the world. (3) Moreover to expand trade without detriment to internal requirements, export controls were liberalised from 1949 which were in force since the world war II. As a result of the policy of liberalization, export trade in most commodities became either completely free or very nearly so by the end of 1949; but due to excessive demands on certain goods, certain restrictions had to be imposed on them. (4) strengthening of Indian commercial representatives abroad.

(B) *operation of trade controls* is a special feature of foreign trade in India. There has been liberalization of export control recently. But it is necessary to understand the policy of the Government of India with regard to these controls. Export control has been in operation to guard against the excessive export of essential commodities, particularly raw materials of which Indian industries are short and to ensure discretional canalization of exports in order to earn foreign exchange.

But following heavy adverse balance of India's Foreign Trade in 1949, the emphasis was shifted from export control to export promotion.

Import control is essentially a problem of foreign exchange. Imports must be regulated as to limit their value to the amount of foreign exchange available and simultaneously to make use of indengenous resources to the best advantage of the national economy. Its main features are the issue of long-term licences for some items, centralisation of control, decentralisation of procedure and issue of licences covering the two major currency areas rather than specified countries.

So far as import control is concerned, it is admitted on all hands, open general licences and consequent liberalization of imports tend to check inflation in the country. The immediate effect of the liberal import policy was that further rise in the price index was arrested. The cost of living index showed the same downward trend. But it was soon found that effective demand for imports in the country was very much greater than could be financed out of the exchange resources. This naturally made the foreign exchange position critical and the government was compelled to cancel O. G. L. permitting the import of only a limited range of commodities without licence from soft currency areas.

(C) *Fiscal Policy*—The policy of granting protection or assistance to industries in order to encourage and promote the industrialisation of the country has been vigorously pursued by the Government. Not only the period of protection has been extended in the case of those commodities which were already enjoying it, but a number of new industries have been given protection. In these matters, the Government is guided by the recommendations of the Tariff Board.

By the *Indian Tariff Act* of 1951 a permanent *Tariff Commission* has been established. The function of the Tariff Commission is to (1) grant protection for the encouragement of any industry in India (2) to increase or decrease in the duties of customs or other duties in relation to any industry for the protection thereof (3) to take action in relation to the dumping of goods in the market occasioned by excessive imports or otherwise (4) to take action where industry is taking undue advantage of the tariff protection granted to it (5) to take action in relation to the protection granted in an industry with a view to its increase, decrease, modification or abolition according to the circumstances of the case.

(D) *Trade Services abroad*—one of the most effective instruments for the promotion of foreign trade is the commercial service abroad which has been expanded by the Government of India. This service pushes Indian goods. In furtherance to this policy India participated in international exhibitions and fairs such as British Industries Fair, Brussels International Trade Fair, Women's International Exposition in New York, Paris National Fair, Canadian National Exhibitions, etc.

(E) *Development of Indian Shipping* has been essential for the expansion of Indian trade. Since independence, rapid strides have been made towards this development. The progress has been so rapid that coastal trade of India has been completely nationalised. Indian ships have begun trading on India-Australia, India-American and India-Europe route. India has also become members of all conference lines.

Government efforts to expand exports—Various measures have been adopted to promote exports. Some of them are bilateral trade agreements, special inducements to export specific commodities, investigation of the problems of export promotion in foreign markets through exhibitions, show rooms etc, making available commercial information to business community in India and abroad, expanding raw material production so as to ease the supply position of raw materials to manufacturers interested in the export trade, ensuring the quality of export articles and facilitating imports of raw materials required by exporting industries. The details are given here—(1) An export promotion committee was set up to investigate the entire problem of export. (2) As a permanent and large scale expansion of exports, special steps have been taken to increase production of raw cotton, raw jute and oil seeds. (3) As quality control is essential to maintain the reputation of Indian products in foreign markets, progressive measures are being taken to ensure the quality of articles exported through the service of Indian Standard Institute. (4) Export goods are given high priority in matter of movement. Chief Controller of Exports is actively helping the export industries in this matter. (5) Special attention is being given to the conclusion of bilateral trade agreements with the object of establishing direct trade contacts. (6) participation in International exhibitions and fairs for the promotion of Indian trade and opening of exhibition of Indian goods in different foreign trade centres and the establishment of show rooms. (7) Continued service to business in India and abroad by Government of India Trade Representatives abroad and supply of commercial information.

Trade and Tariff Agreements—Government of India have entered into several trade agreements and barter deals with foreign countries. Barter deals are generally made with a view to securing an assured supply of food which is scarce.

At a conference of representatives of contracting parties to the General Agreement on Tariffs and Trade which began in Sept. 1950 at Torquay and came to a close on 21 April 1951, India along with order countries signed the 'final act' and also the documents enabling the accession of six more countries to GATT and extending the life of the schedules of GATT upto 31 December 1953. India negotiated with five out of six countries, namely, Austria, Western Germany, Peru, Philippines and Turkey. It did not however enter into negotiations with South Korea. Although GATT permitted tht contracting parties to negotiate among themselves after agreement had been in force for the first three years, for modification or withdrawal of any particular concession granted earlier, India did not find it necessary to seek modification of any concessions. It was also found that it would not be possible to modify India's schedule of concessions without serious loss to India of benefits now extended to Indian products by the contracting parties. Consistant with this position India signed a declaration agreeing to continue in force the tariff concessions granted by it under GATT. India also agreed not to seek any modification in respect of the concessions prior to January 1, 1954.

A. BALANCE OF TRADE

(Sea and Air-Borne)

(*Value in Rs. Mln.*)

Commodities	1948-49	1949-50	1950-51
I—Exports of Indian Merchandise:			
1. Food	872·8	1,158·8	1,325·1
2. Raw Materials ..	978·7	1,042·6	1,164·3
3. Manufactures ..	2,290·6	2,496·1	3,075·3
4. Total: Including others	4,160·2	4,719·4	5,732·3‡
II—Exports of foreign merchandise*	72·9	132·6	278·1
III—Total Exports	4,233·1	4,852·0	6,010·5
IV—Imports of foreign merchandise*			
1. Food	1,129·5††	1,279·6††	1,066·7
2. Raw materials ..	1,276·5	1,442·9	1,983·3
3. Manufactures ..	2,977·5	2,886·6	2,582·5
4. Total: Including others	5,429·2	5,605·1	5,654·6
V—Total Trade	9,662·3	10,457·1	11,665·1
VI—Balance of Trade in merchandise† ..	−1,039·3	−793·6	+129·1

* Includes transit trade.

† Excluding transit trade.

†† Some adjustments on account of imports of foodgrains are necessary.

‡ A supplementary amount of Rs. 141·7 million from Madras which was received after the compilation of accounts is included.

B. INDIA'S PRINCIPAL ARTICLES OF EXPORT

(Sea and Air-Borne) (In volume)

FOOD, DRINK AND TOBACCO

	Unit	1948-49	1949-50	1950-51
1. Cashewnut ..	000 tons	18	19	25
2. Tea ..	mln. lbs.	405·9	441·5	430·3

3. Raw tobacco ..	,,	50·9	82·4	90·1
4. Pepper ..	000 cwts	409·6	455·3	660·8
5. Tobacco mfs. ..	mln. lbs.	5·0	4·3	5·1

RAW MATERIALS

6.* Lac and lac products ..	000 cwts.	490·6	455·3	660·8
7. Raw hides ..	000 tons.	2·1	0·8	1·8
8. Raw skins ..	,,	10·2	12·9	12·2
9. Groundnut oil	mln. glns.	8·9	7·0	15·6
10. Castor oil ..	,,	3·0	1·1	5·8
11. Linseed oil ..	,,	2·3	1·8	1·4
12. Groundnut ..	000 tons.	38·3	126·0	36·2
13. Linseed ..	,,	25·0	71·7	67·1
14. Castor ..	,,	25·0	55·2	78·3
15. Manganese ..	,,	308·9	738·8	533·0
16. Chromite ..	,,	2·6	5·2	3·6
17. Mica ..	000 cwts.	340·3	297·7	383·4
18. Raw cotton ..	000 tons.	76·1	57·7	14·7
19. Cotton waste	Mln. cwts.	1·0	1·5	1·3
20. Raw jute ..	000 tons.	214·6	147·5	0·5
21. Raw wool ..	Mln. lbs.	8·7	27·4	25·4

ARTICLES WHOLLY OR MAINLY MANUFACTURED

22. Cotton piecegoods ..	Mln. yds.	340·9	700·9	1,269·5
23. Cotton yarn ..	Mln. lbs.	7·4	64·9	73·6
24. Gunny bags ..	000 tons.	457·8	433·6	343·9
25. Gunny cloth ..	,,	435·3	308·6	263·3
26. Tanned hides ..	,,	9·4	15·7	14·5
27. Tanned skins ..	,,	5·2	8·1	5·8
28. Carpets & rugs	Mln. lbs.	8·3	10·5	14·0
29. Coir mfs. ..	000 cwts.	869	1,424	1,552

FOOD, DRINK AND TOBACCO
(Value in Rs. million)

1. Cashewnut	..	49·3	56·1	84·6
2. Tea	..	636·9	724·4	780·9
3. Raw tobacco	..	57·8	105·5	124·4
4. Pepper	..	26·7	145·0	200·4
5. Tobacco manufactures	..	24·9	14·1	20·8

RAW MATERIALS
(In Rs. million)

6. Lac & lac products	..	86·8	80·8	118·8
7. Raw hides	..	4·9	2·1	6·2
8. Raw skins	..	49·8	65·9	86·0
9. Groundnut oil	..	64·6	52·1	128·0
10. Castor oil	..	21·8	6·9	43·3
11. Linseed oil	..	14·8	12·8	11·0
12. Linseed	..	13·9	45·6	56·2
13. Castor	..	..	2·8	59·0
14. Groundnut	..	31·3	90·4	33·7

15.	Manganese ..	18·1	58·5	52·0
16.	Chromite ..	0·2	0·2	0·3
17.	Mica ..	59·4	68·5	96·1
18.	Raw cotton ..	140·0	106·0	49·4
19.	Cotton wasts ..	51·5	82·2	123·8
20.	Raw jute ..	239·5	167·4	0·6
21.	Raw wool ..	10·9	37·1	78·7

ARTICLES WHOLLY OR MAINLY MANUFACTURED

(In Rs. million)

22.	Cotton piecegoods ..	362·5	591·1	1,145·7
23.	Cotton yarn ..	12·9	118·4	167·8
24.	Gunny bags ..	614·7	637·8	551·8
25.	Gunny cloth ..	897·2	572·5	525·3
26.	Tanned hides ..	49·6	85·3	94·3
27.	Tanned skins ..	72·0	117·3	105·6
28.	Carpets & rugs ..	26·1	33·1	55·3
29.	Coir manufactures ..	44·7	72·1	107·6

C. PRINCIPAL ARTICLES IMPORTED

(Sea and Air-Borne)

(Value in Rs. millions)

No.	*Commodities*	1948-49	1949-50	1950-51
1.	Belting for machnery ..	21·2	10·1	11·6
2.	Chemicals and chemical preparations ..	205·5	76·3	21·1
3.	Dyes from coal tar ..	123·2	79·6	119·8
4.	Fruits and vegetables (Dried, salted, etc.,) ..	58·7	69·1	95·0
5.	Grain, pulse and flour	873·1	995·4	802·6
6.	Hardware ..	59·6	61·4	45·6
7.	Instruments, apparatus and appliances ..	188·1	207·2	174·6
8.	Machinery and Mill work ..	773·0	1,030·8	824·2
9.	Metals : Ferrous ..	123·1	137·0	176·5
10.	Metals: non-ferrous	222·7	181·6	277·5
11.	Paper and pasteboard ..	142·1	86·6	99·0
12.	Raw Cotton ..	642·3	632·2	1,007·6
13.	Raw Wool ..	31·7	30·3	55·8
14.	Art Silk Yarn ..	128·3	104·6	147·1
15.	Motor cars ..	76·4	31·8	31·9
16.	Motor Omnibuses, vans and lorries ..	94·5	60·9	30·8
17.	Parts of machinery ..	45·4	44·6	98·0
18.	Drugs and medicines ..	79·4	78·6	99·3
19.	Cotton Piecegoods ..	93·0	107·0	13·0
20.	Cotton twist and Yarn ..	45·0	57·7	3·0
21.	Woollen manufactures ..	72·4	59·7	16·5
22.	Provisions and Oilman Stores	71·1	76·9	58·0

D. DIRECTION OF TRADE

(Sea and Air-Borne)

Value in Rs. Millions.

No.	Countries.	1948-49	1949-50	1950-51
	EXPORTS TO :			
1.	U.K.	976·9	1,154·6	1,277·1
2.	U.S.A.	700·7	797·7	1,064·1
3.	Canada	83·8	110·2	135·6
4.	Australia	206·0	261·7	297·5
5.	Argentina	168·2	76·5	96·6
6.	France	73·4	45·1	61·3
7.	Switzerland	12·1	24·9	20·9
8.	Germany	26·1	89·6	84·7
9.	Italy	64·7	53·6	95·3
10.	Belgium	58·7	87·7	75·4
11.	Netherlands	72·5	73·3	89·1
12.	Sweden	21·1	23·5	23·8
13.	Egypt	67·0	78·6	57·2
14.	East Africa	56·4	95·2	96·7
15.	Iran	14·3	17·0	39·4
16.	Pakistan	443·1	151·2	133·8
17.	Ceylon	119·4	164·0	181·9
18.	Burma	99·7	139·3	218·9
19.	Malaya incl. Singapore	50·8	176·8	353·2
20.	Japan	45·9	57·6	89·6
21.	Aden	18·8	70·6	96·5
	IMPORTS FROM :			
1.	U.K.	1,529·6	1,494·1	1,227·4
2.	U.S.A.	1,087·4	879·2	1,158·1
3.	Canada	91·8	120·3	182·9
4.	Australia	265·5	339·7	334·4
5.	Argentina	103·0	87·8	0·5
6.	France	30·1	38·0	110·0
7.	Switzerland	86·6	75·4	72·8
8.	Germany	22·5	58·0	100·4
9.	Italy	183·1	139·5	153·4
10.	Belgium	71·0	48·2	88·3
11.	Netherlands	54·5	48·4	65·8
12.	Sweden	60·9	59·2	52·5
13.	Egypt	318·9	394·3	328·7
14.	East Africa	140·3	183·9	223·9
15.	Iran	205·7	324·8	368·1
16.	Pakistan	223·7	124·7	46·2
17.	Ceylon	27·2	29·4	45·2
18.	Burma	234·0	128·6	187·8
19.	Malaya incl. Singapore	99·0	136·4	165·8
20.	Japan	63·8	214·0	100·4
21.	Sudan	55·3	22·4	74·4
22.	Portugese East Africa	24·7	30·0	44·4

INDIA'S BALANCE OF TRADE IN MERCHANDISE, 1950-51

(Private and Government)

	1949-50				*1950-51*		
Month	*Imports*	*Total Exports*	*Balance of Trade*	*Month*	*Imports*	*Total Exports*	*Balance of Trade*
April	55,50	36,78	−18,72	April	39,18	32,34	−6,84
	(3,72)	(4,07)	(+35)		(77)	(54)	(−23)
May	67,03	32,28	−34,75	May	52,10	34,49	−17,61
	(2,95)	(3,85)	(+90)		(2,97)	(96)	(−2,01)
June	62,88	31,17	−31,71	June	50,81	33,66	−17,15
	(3,00)	(2,24)	(−76)		(3,31)	(1,22)	(−2,09)
July	59,33	32,67	−26,66	July	46,33	37,44	−8,89
	(2,52)	(2,30)	(−22)		(4,54)	(1,07)	(−3,47)
August	54,76	37,76	−17,00	August	60,98	43,60	−17,38
	(4,43)	(3,45)	(−98)		(7,02)	(2,23)	(−4,79)
Sept.	46,37	37,50	−8,87	Sept.	55,62	48,40	−7,22
	(8,09)	(3,09)	(−5,00)		(6,95)	(3,11)	(−3,84)
Oct.	61,36	37,07	−24,29	Oct.	40,56	56,76	+16,20
	(3,64)	(1,21)	(−2,43)		(4,24)	(1,67)	(−2,57)
Nov.	43,18	54,68	+11,50	Nov.	44,14	54,53	+10,39
	(37)	(2,65)	(+2,28)		(1,45)	(1,77)	(+32)
Dec.	35,23	53,80	+18,57	Dec.	47,97	51,39	+3,42
	(15)	(1,95)	(+1,80)		(2,39)	(1,42)	(−97)
January	38,45	47,66	+9,21	January	55,49	57,65	+2,16
	(7)	(22)	(+15)		(2,48)	(1,19)	(−1,29)
Feb.	30,00	44,75	+14,75	Feb.	53,23	61,96	+8,73
	(1,49)	(29)	(−1,20)		(2,03)	(93)	(−1,10)
March	34,76	57,72	+22,96	March	57,75	82,61	+24,86
	(1,04)	(52)	(−52)		(1,16)	(91)	(−25)
Total	588,84	503,85	−84,99	Total	604,17	594,81	−9,36
	(31,47)	(25,84)	(−5,63)		(39,31)	(17,02)	(−22,28)

Note.—(1) Figures relating to the transit trade of foreign countries passing through India have been excluded, (2) Figures include those for land frontier trade with Pakistan, which have been shown separately within brackets. (3) From April 1950 the figures include the foreign air-borne trade recorded at the Delhi airport.

Source: *Department of Commercial Intelligence and Statistics, Calcutta.*

DEVELOPMENT PALNS & PROJECTS OF INDIA

Introduction –Modern state is bound to be more or less a welfare state and its main aim shall be to strive to promote the all round economic well-being of the people. The Directive Principles of the State Policy have enjoined on the Government of India as well as on the States Governments, the duty to achieve a rapid rise in the standard of living of the people by efficient exploitation of the resources of the country, increasing production, and offering opportunities to all for employment in the service of the community. Planning is essentially a way of organising and utilising resources to maximum advantage in terms of defined social ends. Planning in India has to be conceived within the framework of the political structure set up by the Constitution. Ours is a federal structure, in which the Central Government and the Government of the States have their assigned spheres of action. However, democratic planning presupposes an overall unity of policy combined with proper diffusion of power and responsibility. In furtherance of the aims enjoined by the Directive Principles, the Govern- of India in conjunction with the various States Governments have undertaken various plans and projects on different aspects of our national economy, including development of large scale industries, organisation of agricultural and animal husbandry on modern scientific lines and to promote cottage industries on individual or cooperative lines and also to harness the resources of our rivers. In the following pages we shall endeavour to give a brief account of the various development plans and projects of India.

DEVELOPMENT PLANS

The Five Year Plan—as prepared by the Planning Commission involves a total outlay of Rs. 1,793 crores on development initiated in the public sector. The plan is divided in two parts. The first part involves an expenditure of Rs. 1,493 crores, and is expected to restore more or less, the pre-war availability of essential consumer goods by the end of 1955-56, taking into account the expected increase in population over the period. The second part of the plan involving an expenditure of Rs. 300 crores, is intended to ensure a somewhat higher rate of development during the next five years. The first part of the plan is to be implemented at all cost, says the Commission. The second part will be taken up if sufficient external assistance becomes available.

The distribution of expenditure in the first part of the five year plan is shown below by broad categories:

FIRST PART OF THE NATIONAL PLAN, 1951-52 to 1955-56

(*Rs. lakhs*)

	Central Government	*Part A States*	*Part B States*	*Part C States*	*Total*
Agriculture and Rural Development ..	18,04	127,47	37,93	8,26	191,70
Irrigation and Power ..	175,90	191,60	79,91	2,85	450,26
Transport and Communications	309,69	56,47	16,37	5,67	388,20
Industry	75,38	18,04	7,10	47	100,99
Social Services ..	54,24	160,25	28,70	10,89	254,08
Rehabilitation ..	79,00	..	..	..	79,00
Miscellaneous ..	21,76	5,79	1,00	..	28,54
Total ..	734,00	559,63	171,00	28,15	1492,77

Priorities—In the first part of the plan, the priorities are:

(1) completing programmes in hand, including rehabilitation of displaced persons;

(2) increasing the production of food and raw materials over a relatively short period;

(3) implementing schemes essential for developing material and technical resources and enlarging the scope for employment;

(4) consolidating progress already made in social services and providing for gradual expansion; and

(5) providing for more adequate administrative and social services and a more rapid rate of development in the less-developed states.

Planning in a democratic state is a social process in which in some part every citizen should have the opportunity to participate.

The Draft plan is intended to be a document for the widest possible discussion and before submitting its final proposals in complete detail the Commission hopes to have further consultations with the Central Ministries, State Governments, and its own Advisory Board and Panels, and to obtain the views of members of Parliament. It will also take into consideration the views of organisations representing commerce, industry, labour and other interests and those engaged in constructive social work.

The Plan derives its essential character from the Directive Principles of the Constitution which visualise an economic and social order based on equality of opportunity, social justice, the right to work, the right to an adequate wage and a measure of social security for all citizens.

Role of Private Enterprise—The plan envisages a centrally directed economy in which the State plays an active role and there is close coordination between the public and the private sectors. In a planned economy, private enterprise has to visualise for itself and accept, in the larger interests of the country, a new code of discipline. Private enterprise like any other institution will endure and justify itself only to the extent to which it proves to be an agent for promoting the public good. As the bulk of the resources which can be mobilised during the period of the plan will be employed in the development of agriculture, irrigation and power and community services, it will not be possible for the State to make large investments directly in industry. The private sector will continue to play an important part in production as well as in distribution. The State will control and direct investment, regulate foreign trade, conserve foreign exchange and safeguard the standards of essential consumption in the community. While plans for the private sector have to be worked out in consultation with the representatives of the different industries, planning implies the acceptance by all of the overall objectives and standards of performance set by the community; for the economy is a single whole and the plans of the public sector and private sector must produce a coherent picture.

With this approach, the Commission has drawn up working plans for the more important of the industries in the private sector in consultation with their representatives.

The principal emphasis in the plan is on agriculture and irrigation. This is explained by the serious view which the Commission takes of the country's food problem. If the per capita availability of food is to be raised to 14, 15 or 16 oz. per adult, the additional production required would be 8·2, 12 and 15·8 million tons respectively. The target for increase in food production has been fixed at 7·2 million tons by 1956, and out of this additional production of 7·2 million tons, 2·3 million may come from major irrigation projects, 1·9 million from minor irrigation schemes, 1·5 million from land improvement and reclamation schemes, 0·6 million from manure and fertiliser schemes, and 0·4 million from seed distribution schemes, and 0·5 million tons from other schemes.

Relation to the Colombo Plan—The five year plan outlined above represents in some ways an advance on the Colombo Plan published in 1950. The present plan is based on a detailed examination of projects such as was not possible within the limited time available for the preparation of the Colombo Plan. As a result of this examination, some of the schemes figuring in the Colombo Plan have been excluded or modified and some new schemes expected to yield quick results have been introduced. A closer analysis of internal resources available at present for development, and the measures contemplated for augmenting them with a view to securing the maximum development possible through the country's own effort, have also led to an improvement in the estimates of these resources. Further, the Colombo Plan which involves an outlay of Rs. 1840 crores over the period of 1951-57 includes an item, namely, expenditure to cover the depreciation of railway assets in the period of the Plan, which the five year plan does not include (but for which the necessary resources are separately provided). Allowing for this item, and taking into account certain changes in cost estimates as a result either of price increase or of revision on other grounds, the five year plan represents a larger measure of effort than it was possible to contemplate at the time the Colombo Plan was formulated. In consequence, the targets of production especially in the field of agriculture visualised in the five year plan are higher than those worked out for the Colombo Plan. It will be also noticed that unlike the Colombo Plan, the five year Plan democrates a part consisting mainly of projects under execution, which should, foreign aid to the required extent be not forthcoming, will have to be implemented in any case. This will inevitably entail a greater measure of effort on the part of the community.

The formulation of the Colombo Plan marks an important step in regional planning. The Indian programme under this plan includes multipurpose projects (*e.g.,* the Damodar Valley, the Hirakud and Bhakra-Nangal schemes), the Integrated Crop Production Plan for increased production of foodgrains, cotton, raw jute, oilseeds and other crops, the development of transport facilities, fuller use of the installed capacity of industrial plants and public health and educational schemes.

Relation to the Point Four Programme—The Five Year Plan is integrated also with the Point Four Programme of President Truman. Under the Point Four Programme, India signed on 28th December, 1950 an agreement with the U.S.A. and the two Governments undertake to co-operate in the interchange of technical knowledge and skill and in related activities designed to contribute to the balanced and integrated development of the economic resources and productive capacity of India.

Comprising five articles, the agreement serves as a basic one, and individual contracts for specific projects will be concluded as and when necessary. It also makes a provision for coordination and integration of the technical programmes operated in India. India's share in the first year's allocations by the U.S. Congress for the bilateral technical aid under the Point Four Programme has been provisionally fixed at $1·2m.

The agreement involves financial liability also to India. The liability will relate to the local costs for such items as office space, land, secretariat service and internal transportation. India has to endeavour to make effective use of the results of technical projects carried on in India in co-operation with the U.S.A. U.S. Government employees assigned duties in India under the agreement will enjoy immunity from Indian taxation and customs duties as those detailed by the UN's specialised agencies.

A technical assistance unit has been opened in the Finance Ministry (Economic Affairs) for co-ordination and integration envisaged in the agreement which has already come into effect. Several U.S. experts are at present working in India on agricultural projects. The essential purpose of the programme is to provide such elements of American technical knowledge and experience as may be available and useful in contributing to the general economic development of countries interested in receiving assistance. Out of the appropriation made by the U.S. Congress of 34·5 million for technical assistance, an amount of $ 11 million has been allocated for bilateral aid to all countries for the fiscal year ending June, 30, 1951. The allocation for India from this amount has been provisionally fixed at $ 1·2 m.

The Sources of Finance of the First Five Year Plan—The internal resources for financing the first part of the five year plan amounting to Rs. 1,493 crores are expected to be found from the following sources :—

ESTIMATE OF INTERNAL RESOURCES AVAILABLE FOR THE PLAN

	(Rs. crores)
1. Surplus on Revenue Account	130
2. Resources normally set apart in the Revenue Account for development expenditure under civil aviation, broadcasting, education etc., for grants to states for GMF and development, for rehabilitation of displaced persons etc.	118
3. Resources available for capital account for development :	
(a) public loans	35
(b) small savings and unfunded debt ..	250
(c) others	78
4. Resources available for railway development out of the ordinary revenues of the railways	30
5. Total resources available to the centre ..	641
6. Centre's assistance to states assumed in the preparation of their plans	211
7. Resources available for the development expenditure of the Centre	430
States:	
8. Surplus on revenue account	81
9. Resources normally set apart in the Revenue Account for schemes of expansion under social services, agriculture, irrigation, electricity, roads, etc.	275
10. Resources available from Capital Account for development	
(a) public loans	79
(b) others	45
11. Assistance from the Centre assumed in the preparation of the plans of States	211
12. Resources available for the development expenditure of the States	691

The surplus of Rs. 81 crores on revenue account in the states over five years is to be secured by raising additional resources of the order of Rs. 213 crores. The programme for mobilising internal resources for development in the states contemplates increased income from land, estate duties, wider coverage and better administration of sales tax, betterment levies, water rates, certain minor taxes on entertainment and motor vehicles etc., economies in expenditure, and local loans for local projects which do not encroach on the normal sources of funds for the capital market. There will still be a gap of Rs. 372 crores over five years in the first part of the plan. After taking into account the resources likely to become available through the food loan from the United States and through aid offered under the Colombo Plan by Canada and Australia, there remains the possibility of being compelled to resort to deficit financing to the extent of about Rs. 290 crores if further external assistance is not forthcoming. Deficit financing of this order would impose a deficit strain on the economy, although to some extent, this strain could be diminished by drawings on the sterling balances. The releases from these balances including the unspent balances of 1951-52 which can be carried over, would amount to Rs. 290 crores over the period.

Agrarian Policy—The Plan envisages for affording security to the tiller and says that the main aims in the reorganisation of agriculture should be to increase production and make cultivation profitable, and at the same time to reduce the number of workers engaged in the ordinary operations of farming. In view of the present shortage of food and raw materials, agrarian policy has to be conceived so as to strike a balance between three different objectives, namely, (1) maintenance and increase of total production; (2) economic efficiency; and (3) social justice. It is possible, the Plan says, to propose changes in the land system from the point of view of sectional interests, such as peasant owners, tenants-at-will and the landless labour. For the community as a whole it will be best if certain lines or patterns of reorganisation of agriculture are broadly accepted as the common national programme towards the fulfilment of which the administration and the people bend their energies.

Stating that uneconomic holdings are at the root of many of the difficulties of Indian agriculture, the Plan says that agriculture cannot be development as an efficient industry unless the unit of management becomes much larger than it is at present. A substantial increase in the size of the unit of management may be brought about by (1) nationalising the land and making it available for cultivation, (2) placing a ceiling on existing holdings and distributing the surplus land for individual or co-operative cultivation, (3) inducing small farmers to become members of the co-operative farming societies, and (4) taking the village as a whole as the unit of co-operative management in which, while meeting the claims of ownership through an ownership dividend, the entire area is treated as a single farm and is divided for convenience of cultivation into suitable blocks.

The Plan rejects nationalisation of land as an impracticable course. It points out the difficulties in the way of a policy of ceilings on individual holdings. The main solution to the problem of Indian agriculture lies in the direction of co-operative cultivation, says the Plan.

Co-operative village management has been recommended as the ultimate objective of re-organisation of agriculture. In co-operative village management the area of the village becomes the unit of land managemene and all the land of the village is regarded as a single farm. Rights of ownership are recognised and compensated for through an ownership dividend to be paid at each harvest. Co-operative village management is to be introduced in any village where at least two-thirds of the owners or permanent tenants holding not less than one-half the cultivated area of the village express their preference in favour of its adoption. Tht Commission recommends enabling legislation for co-operative villagt management.

After examining the principal objections to Co-operative Village management, which it recommends as the eventual objective, the Planning Commission outlines its programme for immediate action. This consists of three main proposals: (1) Establishment of Village Production Councils, (2) Establishment of Registered Farms; and (3) Promotion of Co-operative Farming Societies.

In every village or group of villages there should be an organisation charged with responsibility for developing production. Where a village falls within the jurisdiction of panchayat, the Village Production Council will act as the channel through which all Government assistance is provided to the village, frame programmes of production to be achieved at each harvest, frame budgets of requirements for fulfilling programmes, take steps to bring uncultivated land under cultivation, secure minimum standards of tillage and organise voluntary labour for community works.

Registered Farms and Co-operative Farming Societies are considered to be the most suitable methods, at present available, for increasing the size of the unit of land management in agriculture and organising as large a sector as possible as an efficient industry. The Plan suggests that all holdings above a level to be prescribed should be organised as Registered Farms, and those below the prescribed level should be brought together increasingly into small co-operative farms. The voluntary formation of Cooperative Farming Societies is to be encouraged as a part of a positive drive and the Plan recommends a number of measures to this end.

Foreign Capital—As regards foreign capital, the Plan observes that the free flow of foreign capital should naturally be welcomed, particularly it would ensure the supply of capital goods and technical know-how and make it possible to utilise foreign patented processes. From the point of view of industrial development it would be best if foreign investments in the country take the form of equity capital. Referring to the managing agency system, the Plan suggests that adequate measures should be taken, even pending the report of the Company Law Committee, to prevent large investments in the share of other concerns with a view to obtaining control in the management.

Population and Family Planning—There is insufficient awareness yet among the people of the need for family planning. Family planning is a vital step in economic and social planning. In as much as an alteration in population trends takes at least a few generations to materialise, a plan for a limited period has to concentrate on the education of public opinion as to the need for the limitation of numbers. A programme of family limitation must be a social movement which would call for initiative on the part of individual families. The state can only play a limited role in the respect. Following the recommendations of sub-committee on Population and Family Planning, the Plan recommends: (1) the state should provide facilties for sterilisation or giving advice on contraception on medical grounds; (2) such help and advice should not be withheld from others who seek and need it on social and economic grounds; (3) and research and information centres should be organised by the State by means of financial assistance and otherwise.

Plan for Industries—Reviewing the industrial development which has taken place in recent years, the Commission sets forth the following aims for the Five Year Plan for Industries: (1) meeting the demands for industrial products on account of schemes for agricultural development and expansion of irrigation and power; (2) fuller utilisation of existing capacity of producer goods industries like jute, and consumer goods industries like cotton textiles, sugar and soap; (3) expanding the capacity of industries producing pig iron, steel, heavy chemicals, etc., which are of basic importance to the general economic development of the country; (4) completion of industrial units on which a part of the capital expenditure has already been incurred; (5) removing the lacunae and drawbacks in the existing industries.

To run the machinery for planning, the Plan has suggested for the establishment of the *National Development Council,* including the Prime Minister of India and the Chief Ministers of States. The Government of India have already set up this Council and a Minister of Planning has been appointed to the Central Cabinet.

An agreement was signed in New Delhi on September 15, 1951, between the Government of India and the Government of the U.S.A. under which the latter will furnish to the former scientific and engineering services connected with river valley projects through the U.S. Bureau of Reclamation. This is in pursuance of the General Agreemnt of December 1950, providing for technical cooperation between the two Governments. The Bureau will make available at its offices, laboratories and other installations the services of personnel, equipment and facilities to render scientific and technical service and advice required by the Government of India.

DEVELOPMENT PROJECTS

River Valley Projects or Irrigation and Power Schemes—India is predominantly an agricultural country and it is a pity that our cultivators have to depend on the whims of the rain god and in consequence Indian budget has been for long a gamble in the rainfall. Better irrigation is essential to expand and improve India's agriculture. The first part of the Five Year Plan contemplates expenditure of Rs. 451 crores on irrigation and power schemes. The total costs of projects included in this part of the Plan is Rs. 729 crores, of which Rs. 138 crores have already been spent. The projects are calculated to irrigate an additional area of 8·7 million acres by 1956 and to provide additional power amounting to 1·1 million kilowatts. This will increase the irrigated area of the country by 20 per cent and the power potential by 70% over existing capacity. On completion, the projects are expected to irrigate an additional area of 16·5 million acres and to increase the power potential by nearly 2 million kilowatts. The programme of irrigation and power would be spread over a period of 15 to 20 years, to double the area under irrigation and to secure additional production of power amounting to 7 million kilowatts.

Irrigation and power schemes included in the first part of the National Plan, are *Bhakra-Nangal, Harika, Damodar Valley Project, Hirakud Dam,* etc. The central projects in respect of which design work was undertaken were the Damodar Valley Corporation, the Hirakud Dam and the Kakrapar Projects. In addition, considerable work was done in respect of the Kosi project and its first stage is ready for execution. The investigations on various other projects such as Ganga Barrage Project in Bengal, the Rajasthan Project in Rajasthan, Sabarmati project in Bombay, Harangi and Lakshmanthirtha projects in Coorg, Mahanadi and Jonk projects in Madhya Pradesh etc., were continued. The Damodar Valley Corporation have taken up in hand the first phase of development of the Damodar Valley project, *viz.,* the Bokaro Power Station, Transmission system, Konar I, Tilaiya, Maithon and Panchet Hill Dams, the Durgapur Barrage project and the Canal system.

1. **Damodar Valley Corporration**—The Damodar Valley is a great river basin. It includes portions of Bihar and Bengal and comprises an area of 8,500 square miles.

The upper valley, above the confluence of Damodar and the Barakar rivers, lies in Bihar and comprises parts of the districts of Hazaribagh, Palamau, Ranchi, Manbhum and Santhal Parganas. It is a plateau intersected by deep ravines and extensive valleys.

The lower portion of the valley, below the confluence of the Barakar and the upper Damodar rivers, lies in Bengal and receives layers of alluvial soil deposited by flood waters. The soil of the lower valley is fertile, but in the absence of proper irrigation, intensive cultivation is not possible.

Floods which are a common feature of the river in the lower valley, leave swamps and pools which breed malarial mosquitoes by the million. Malaria and dysentery take a heavy toll of life and sap the vitality of the people in parts of Bankura, Hooghly Burdwan, Howrah and Midnapore.

The Damodar valley has a large variety of mineral wealth. It has the major portion of India's coal resources. Large reserves of bauxite and aluminium laterite are centred in Palamau and Ranchi districts. Other important minerals found here are fire-clay, china clay, mica, limestone, lead, silver, antimony, steatite, molybdenite and quartz. But valley's 5,000,000 inhabitants have a low standard of living.

To harness fully the resources of the Damodar river valley, a multipurpose project popularly known as the Damodar Valley Project has been launched. Flood control is the most important feature of the scheme. The scheme is patterned on the T.V.A. and envisages the construction of seven dams, a low diversion dam and a barrage. The barrage is to be located at Durgapur, about 15 miles below Ranigunj, and will divert the regulated flow into irrigation canals generally located in the lower valley. Another attractive feature of the project is a navigable channel in the vicinity of the coalfields.

Flood control is an important feature of the Damodar Valley project and for that purpose two dams at present will be constructed, one at Maithon on the Barakar, and the other near the Panchet Hill on the Damodar. Five other dams will be built as follows,—one at Aiyar on the Damodar, one at Balpahari and one at Tilaiya on the Barakar, one across the Konar and probably one across the Bokaro also. The total controlled storage capacity at the three dams on the Barakar river is 1,800,000 acre feet while the four dams on the Damodar river and its tributaries provide nearly 2,900,000 acre-feet.

The project will irrigate 1,000,000 acres of land in Bengal and Bihar though most of it lies in Bengal. The project provides for silt clearance of moribund channels and their regular flushing.

The total cost of the project has been estimated at Rs. 55 crores. Of this amount 28 crores have been allocated to power generation, Rs. 13 crores to irrigation and Rs. 14 crores to flood control. The cost will be borne by the Central Government, Bihar Government and West Bengal Government.

The Damodar Valley Corporation—Under the Damodar Valley Corporation Act, a board with three members has been constituted. The Corporation is to execute and operate schemes for irrigation, the generation of power and flood control. Besides, these three main purposes, the Corporation will promote navigation, afforestation, public health and industrial, economic and the general well-being of the people of the valley. Another provision of the Act empowers the Corporation to establish and operate laboratories, experimental and research stations, and farms with a view to utilising the products of the valley in the most economical manner.

The Damodar Valley Corporation was established on the 7th July 1948. The scheme will generate hydro-electric and thermal power of about 350,000 KW. The scheme includes, apart from the construction of 7 or 8 dams, an irrigation barrage and canal system, a steam power station at Bokaro with a capacity of 200,000 KW and necessary transmission lines. The Corporation is proceeding with the first phase of this project comprising the Bokaro thermal station and transmission lines, the Konar, Tilaiya, Maithon and Panchet Hill dams, and the Durgapur barrage and canal system.

2. **Hirakud Dam Project**—The Hirakud dam project is a project of the Mahanadi river valley in Orissa. The project is estimated to cost Rs. 478·1 million; it will provide effective flood control by storing water in the resevoir during the floods and releasing it gradually in the dry season. The project will provide flow and lift irrigation to about one million acres and generate hydro-electric power of the order 3,00,000 KW. It will also make the Mahanadi river navigable from the sea to Sambalpur.

The river Mahanadi carries annually 74 million acre feet of water, which is at present running to waste causing untold damage and destruction by floods, in its passage to the sea. The scheme for the unified development of the Mahanadi valley is designed to put a stop to this colossal waste of natural resources and human potential, and to control, conserve and utilize the waters of the Mahanadi river for purposes of irrigation, hydro-power generation, navigation, flood control and other facilities such as fish culture, malaria control, soil conservation, recreation etc. This scheme will include three units, namely, the Hirakud Dam Project, the Tikkarpara Dam Project and the Naraj Dam Project, each one with its own canal system and hydro-electric power installation.

Of the three units of the basin wide plan, the Hirakud Dam Project lies uppermost on the Mahanadi river. The Hirakud Dam Project includes: (*a*) the construction of a dam across the Mahanadi about 9 miles upstream of the town of Sambalpur. The dam will be nearly 3 miles in length across the main channel with 19 miles length of low dykes on the two sides. The dam will submerge an area of about 1,50,000 acres;

(*b*) gravity and lift irrigation canals on either side;

(*c*) construction of two generating stations, one at the main dam at Hirakud to utilise the fall created by the construction of the dam; and the second one at the subsidiary dam forming the balancing resevoir at the power channel (280 ft. wide and 16½ ft. deep) from the upper power house, and utilising the steep slope in the river below Hirakud.

The Hirakud Dam Project is estimated to cost Rs. 47·81 crores, inclusive the dam, the hydro-electric installation, the irrigation system and the navigation facilities.

3. **Kakrapar Project**—It is estimated to cost Rs. 121·6 million. The project will provide irrigation for a gross area of 6,00,000 acres and a power potential of 2,88,000 KW. Partial irrigation will be available by the year 1951-52 and power to the extent of 24,000 KW from 1953.

The project is being financed by the Government of Bombay and its construction has been entrusted to Central Water Power, Irrigation and Navigation Commission (CWINC). The work on this project has just commenced. The Kakrapar project in Bombay provides for navigation from the sea face near Surat up to the reservoir of the dam at Kakrapar and 50 mils further inland.

4. **Kosi Dam Project**—Kosi Dam project which is now estimated to cost about 1770 million, envisages complete flood control, irrigation of 384·5 million acres, power production of 1·8 million KW and navigation in the rivers and canals. The trial load analysis of 780 ft. high dam were completed by the Commission's engineers under the guidance and with the assistance of the US Bureau of Reclamation. The project has been divided into 7 easy and self-supporting stages.

The report from stage I costing Rs. 105 million has been prepared and the first stage is under consideration of the Government. The Kosi dam when constructed will be the highest in the world.

5. **Bhakra-Nangal Project**—In the Punjab, the Bhakra Nangal project is expected to turn the State into a granary and an industrial area to wipe out the food deficit of the Punjab. The principal feature of this project is the construction of a dam 680 feet high on the river Sutlej near Bhakra, about 50 miles upstream of Rupar town in Ambala district. About eight miles downstream of the Bhakra dam, Nangal dam is now under construction. This is 90 ft. high and will serve first to divert the requisite supplies from the river Sutlej into the Nangal Hydel Canal and then to provide storage to even out the fluctuation in supplies. The area irrigated annually by the Bhakra Nangal project is expected to be 3·6 million acres that will yield 1·13 million tons of foodgrains and 800,000 bales of cotton. The project is estimated to cost Rs. 132·9 crores and would be complete by 1956.

6. **Mor River Project**—The Mayurakshi Reservoir project, the most important development project in West Bengal, consists of two distinct parts. Part I relates to the construction of high dam at Messanjore in Santhal Parganas, where the Mayurakshi passes through a gorge. Part II consists of a barrage across the river Tilpara near Suri and digging of some 900 miles of canals. It was sanctioned by the Government of India in 1946. But due to various causes, political, economic etc, it was only in 1948 that the work started in earnest and since then it has progressed very satisfactorily.

The Messanjore dam in Bihar when completed, will be 2,170 feet long and will impound a lake covering 27 sq. miles and store 136,000 m. gallons of water. Besides supplying water for irrigation in Birbhum the power plant at the dam site will produce 4,000 kw electricity. The whole project it expected to be completed in 1954 and will cost Rs. 4,80,00,000.

Tilpara barrage near Suri is now complete which irrigates 100,000 acres. The barrage across the Kopai and Bakreswar are nearing completion and is expected to be ready in June, 1952. Work on Dwarka barrage has also been started and will be completed in another year. The work on Brahmani barrage will be taken up in 1952.

When completed, the project will bring 600,000 acres under irrigation resulting in an increased yield of about 300,000 tons of paddy and 50,000 tons of rabi crops.

Other Projects—Other well-known new projects are the *Radhanagari Hydro scheme* in Bombay State, the *Tungabhadra project* undertaken jointly by Madras and Hyderabad, the *Chambel irrigation and Hydel Development project* in Madhya Bharat, the *Mahatma Gandhi Hydroelectric works* at Mysore, where the magnificant Jog Falls have been harnessed and the first unit capable of generating 12,000 Kk. was switched on in 1948.

Fertiliser Factory, Sindri—India produces very little artificial fertilisers for which there is great need in this country. After the Bengal famine in 1943, it was decided by the Government of India that immediate action should be taken to establish indigenous production of nitrogenous fertilisers to the extent of 350,000 tons a year. An expert technical mission was brought out to India in June 1944 to advise on the best methods of establishing the industry. The Mission recommended the erection at Sindri in Bihar of a large factory for the production of 350,000 tons of ammonium sulphate per annum by the gypsum process. And a contract was entered into with an American firm, Messers Chemical Construction Corporation of New York, to design the complete factory, to supervise its construction and the bringing of the factory into production. Another contract was concluded with a British Firm, Messers Power Gas Corporation, to erect the factory under the supervision of the American Firm.

The work comprises—(*i*) The construction of Fertiliser factory to produce 350,000 tons of ammonium sulphate per year; (*ii*) The construction of a power house to supply the factory with power and process steam and supply power in bulk to the Damodar Valley Corporation; (*iii*) The construction of water supply installation to meet the requirements of the factory and connected works amounting to 12 million gallons per day; (*b*) The construction of an infiltration gallery across the bed of the Damodar river to supplement the supply in the dry season; (*c*) The construction of dam on the Gowai river to store reserves of water; (*iv*) The construction of township to house all personnel employed in the above scheme; (*v*) The construction of broad-gauge railway. (*vi*) The development of gypsum deposits to supply the factory with the gypsum required for manufacture of ammonium sulphate; and (*vii*) Arranging for the supply of all other raw materials such as coal, coke etc., required for the operation of the Fertiliser Factory.

In the process of manufacture of 1,000 tons of ammonium sulphate per day, about 900 tons of calcium carbonate sludge will be thrown up as a by-product. Plans are under consideration for utilising this by-product for a cement factory with an installed capacity of 300 tons per day. The Sindri Fertiliser Factory has been registered as a private limited company, in which the President of India will hold most of the shares of the Company. The authorised capital of the Company is 30 crores, of which

Rs. 10 crores will be in the form of debentures. The Government of India have already spent Rs. 23 crores on Sindri Factory.

Machine Tool Factory—Before the last world war, there was no machine tool industry in the country. Despite serious difficulties and handicaps, machine tools production rose during the War years from an insignificant total of 100 items per annum to about 6,000. At present there are about 16 graded and about 50 ungraded firms in India. The present production does not meet more than three per cent of the total requirements of the country. The industry is not yet in a position to manufacture production and precision types of modern machine tools, which are in great demand for the purpose of rehabilitation and expansion of essential services, *viz.*, Defence, Railways, etc. The value of the annual demand for machine tools is roughly estimated at Rs. 100 million.

The Government of India have entered into an agreement with the Oerlikon Machine Tool Work, Buhrle & Co., Zurich, Switzerland. In addition to providing for the technical experts and keymen, equipment, jigs, tools, fixtures, duplicate patterns, operation schedules, etc., the agreement envisages the manufacture of 900 high speed lathes, 460 milling machines, 240 heavy duty drilling machines per year. A gear cutting shop and a foundry are incorporated in the Project Programme. The estimated cost of the scheme is about Rs. 93·7 million. The annual value of the output, when the factory is in full production, which will be in 1955-56, is estimated at over Rs. 40 million. Work on the project will shortly commence at Jalahalli, near Bangalore.

Indian Telephone Industries Limited—The Telephone Industries Limited has been set up by the Government for running a factory for the manufacture of automatic telephone and carrier equipment. It is the only factory of the kind in India. It is now being worked as a private limited company in which about 90 per cent of the share capital is held by the Governments of India and Mysore. The remaining share capital roughly 10 per cent, has been allotted to Automatic Telephone and Electric Company Limited of England in the form of free shares under the terms of the agreement. The factory is expected to go into full production during 1953-54 after which no further investment wil be necessary.

Pending manufacture of complete telephone in India, the assembly of the telephone instrument is being undertaken from parts obtained from England. The total number of telephones assembled up to the end of December 1950 was 25,258.

Scheme for the Manufacture of Penicillin, Sulpha and Antimalarial Drugs—The scheme contemplates the establishment of a factory for the manufacture of Penicillin, Sulpha and antimalarial drugs at a capital cost of Rs. 35 million, 51 per cent. of which will be subscribed by the Government of India and 49 per cent by the Government of Bombay.

An agreement has been entered into with Messers Karnbolaget A. B. Biochemical Industry, Stockholm, Sweden, for technical advice for the designing and construction of the plant for the manufacture of penicillin and the training of technical staff. For the services rendered by them and the training of technical staff by them, the firm would get a remuneration of 250,000 Swedish Kroner (about Rs. 2,20,000).

The Indian Penicillin Committee selected a site in Dehu Road (near Poona) for the Factory and, to meet the immediate requirements of Penicillin in the country, took steps to set up a penicillin bottling plant in a new building in the Haffkine Institute, Bombay. This plant has a capacity to bottle 10,000 vials a day and on an average 1,500,000 mega units of penicillin per year. The plant started working on May 28, 1951 and will henceforth meet Government requirements and a part of the requirements of the public.

An offer of monetary and technical assistance for a Penicillin Project in India was received from the World Health Organisation and the United Nation International Children's Emergency Fund at the end of 1950. The Government decided to set up the Penicillin Factory in collaboration with WHO/UNICEF. An Agreement in this connection was concluded on July 24, 1951, between the Government of India, the World Health Organisation and the United Nations International Children's Emergency Fund. Under this agreement, the Government will provide the land for the factory and other buildings necessary for running it and also fittings, administrative offices, laboratories, pilot plant, workshop and other services such as steam plant, electric sub-station, sewage disposal water etc. The estimate for providing these is about Rs. 10 million. The UNICEF will supply all the imported equipment of the value of $850,000 and WHO will arrange for and provide technical assistance involving an expenditure of $350,0000. The factory is planned to produce 3,600 million units of Penicillin per year to start with, rising to 9,000 million units per year.

Printing Ink: Pilot Plant to be Enlarged—The Council of Scientific and Industrial Research have evolved a new process for the manufacture of stamp-cancelling and printing inks. Early in 1950, the Council installed a pilot plant for the manufacture of these inks, with a capacity of 1,500 lbs. per day of 8 hours. The cost of this plant is Rs. 28,000/-. It is now proposed to make additions to the plant with a view to increasing the output as follows:—

	lbs. per annum
Rotary newsprint ink	8,50,000
Duplicator ink	1,00,000
Stamp-cancelling ink	50,000
Total ..	10,00,000

It is estimated that the proposed additions to the plant will involve a non-current expenditure of Rs. 68,000/- and recurrent annual expenditure of Rs. 6,65,837/-.

It is expected that the quantity of 10,00,000 lbs. of inks will yield a profit of about Rs. 100,000 per annum, based on the current prices. At present, rotary newsprint ink is mostly imported from the USA.

National Laboratories—The Government of India have sanctioned the establishment of 11 National Laboratories and 6 Coal Survey Stations by the Council of Scientific and Industrial Research.

The work of the National Laboratories is of a fundamental and applied character along lines likely to promote research in the industries concerned. The laboratories will also assist in the proper utilisation of the raw material resources and so further the development of the country's industries. The development of new processes evolved at the National Laboratories will whenever necessary, be carried out up to the pilot plant stage so that the industry requiring aid will benefit from the investigations carried out at the laboratories. The laboratories will initiate major investigations and will maintain the closest co-operation with all existing research institutions and with industry.

The National Chemical Laboratory at Poona and the National Physical Laboratory at Delhi were opened in January 1950, while the Fuel Research Institute, Dhanbad, the Central Glass and Ceramic Research Institute, Jadavpur, the Central Food Technological Research Institute, Mysore, the National Metallurgical Institute, Jamshedpur, and the Central Drug Research Institute, Lucknow, were opened in 1951. The foundation stone of the Central Research Institute was also laid during 1951 while the construction of buildings for the Central Leather Research Institute at Madras, the Central Electrochemical Research Institute at Kottaiyur in South India, the Central Building Research Institute at Roorkee and the Central Road Research Institute at New Delhi has been taken in hand.

Industrial Housing Schemes—In pursuance of the Government resolution on Industrial Policy and the announcement made in April 1948 regarding the construction of one million houses in 10 years' time, the Ministry of Labour in March 1949, formulated and circulated for the consideration of the State Governments a scheme for the housing of industrial workers. The broad features of the scheme are that two-thirds of the capital cost will be provided by the Central Government as an interest free loan and one-third by the State Governments or employers sponsored by them as a 3 per cent loan. The workers will pay rent at 2½ per cent of the cost subject to the limit of 10 per cent of their wages. The employers' contribution will be in the shape of rent at 3 per cent of the cost for the houses allotted to their workers.

The response of the State Governments has not been very satisfactory. The Governments of Bombay, Bihar, Orissa, Madhya Pradesh and the Punjab alone expressed willingness to participate in the scheme. Accordingly, the distribution of the sum of Rs. 10 million provided in the 1950-51 budget was confined to these States only. Bombay received a sum of Rs. 6 million and Bihar, Orissa, Madhya Pradesh and Punjab each a sum of Rs. 1 million (Bihar later on surrendered a sum of Rs. 500,000 out of Rs. 1 million which it is proposed to allot to the Government of Bombay). As regards the progress so far made under the scheme, the Bombay Government have almost completed 1,268 tenements for workers. The other four states have completed the preparatory work on their projects and started or are about to start with the construction of houses.

The sum of Rs. 16·8 million is proposed to be similarly advanced to the state Governments for the implementation of the scheme during 1951-52.

Dry Core Telephone Cables Production—India's requirements of dry core paper insulated telephone cables are now met entirely from imports. It is estimated that the annual requirements of this material by the Posts and Telegraphs Department will be of the value of about Rs. 8 million from 1951-52. Apart from the fact that this demand by itself would justify the establishment in India of an economic unit for the manufacture of these cables, it is considered that India should not, in respect of this vital material, depend on imports for meeting her needs.

With this object in view, a technical assistance agreement was concluded with Messrs. Standard Telephone and Cables Ltd., U.K., on November 30, 1949. According to the agreement, the company will prepare drawings, estimates, etc., for the erection of the factory, supervise its erection, provide engineers at their cost for the initial construction period and take technical responsibility for putting into service the plant and machinery erected. They will also supply technical information required for the manufacture, give licences for patents, etc., to Government, employ their staff at Government expense in the factory and train Indian personnel in their works in the UK.

The factory is estimated to cost Rs. 10 million approximately and the value of the annual output will be about Rs. 8 to Rs. 10 million.

The factory will be established at Mihijam in the Asansol District (West Bengal).

The layout of plans for the factory and residential buildings have been prepared and construction work at the site is expected to start shortly.

Port Development—In pursuance of the recommendations of the West Coast Major Port Development Committee, a National Harbour Board has been constituted to advise on matters of general policy relating to port management and development, including their effects on industry, commerce, shipping, railways, etc., so as to ensure integrated consideration of all important port matters. The Board consists of representatives of the Ministries concerned in the Government of India, the Maritime States, Major Port Authorities and the Development Commissioner, Kandla.

As regards minor ports, India has over 200 such ports spread over her long coast line serving the Arabian sea and the Bay of Bengal. Only about the half the number are in good condition and the large majority of these are mere roadsteads. All these ports are subject to the administrative control of the State Governments and a good deal had to be done for introducing uniformity in the administrative set up of and financial control over these ports. The National Harbour Board after examining the matter had recommended that a marine survey of selected minor ports should be carried out by a central organisation systematically and an enquiry should be held and necessary data collected with a view to bringing about effective port development. Action is being taken on these recommendations.

The Development of Kandla as a Major Port—The partition of India and the loss of Karachi brought to the fore the already existing need for a major port on the Kathiawar-Kutch coast. The Ports Technical Committee in 1946 mentioned Kandla as a likely site and the West Coast Major Port Development Committee in 1948 unhesitatingly turned the spotlight on Kandla.

Kandla lies six miles up on the west bank of the creek from which it derives its name. The creek runs due north from the east end of the Gulf of Kutch. It is wide and deep. The deep water lies close inshore, and thus forms a deep, natural, well-sheltered harbour for ships of any size. There are however, certain problems, on the proper solution of which depends the best utilisation of these natural advantages.

These problems are created by a high range of tides—24 feet at springs, amongst the highest in India and much higher than at any of the other major ports, strong currents in the creek, poor soil and sub-soil conditions, low lying grounds along the banks of the creek and a bar across its mouth. In addition, the problem of water supply to the port was a matter which had to be carefully examined. Built in 1929 at the instance of the then Maharao of Kutch to serve along with a few fairweather roadsteads, the local needs of the isolated territory of Kutch, the present port has restricted shore facilities.

The Kandla project was conceived with the threefold object of constructing a port, a railway and a township. In 1949, a Port Advisory Committee was formed to assist and advise the Government in the furtherance of the project on a proper planned basis. The port will serve a hinterland of over 250,000 square miles with a population of 45 million. A considerable portion of this area has long suffered from lack of transportation facilities and therefore remained undeveloped. Kandla will mean for most of the trade centres in this area a shorter lead to the port by 211 miles on an average. The saving to the trade in railway freight alone will amount to Rs. 80 lakhs a year. The port is expected to cost about Rs. 11 crores and construction will be completed by 1954.

Development Programme for Iron and Steel Industry—The development programme of the iron and steel industry was discussed at a meeting held in New Delhi in December 1950 by the Planning Commission when representatives of various Ministries and of the manufacturers were present. The discussion showed that the total capital investment of the main producers came to Rs. 682 million and the skilled and semi-skilled workers employed in the industry numbered 58,000. The installed capacity of the main producers was estimated at 1,071,000 tons of finished steel and 1,878,000 of pig iron. The actual production of pig iron in 1949 was 1,579,000 tons and of finished steel 927,000 tons. Maximum production of steel was attained in 1943 when it came to 1,149,308 tons.

The availability of pig iron for foundries and of billets for secondary producers and re-rolling mills was also discussed. It was stated that the foundry requirements were of the order of 300,000 tons per annum while secondary producers and re-rolling mills which numbered about 90 required about 600,000 tons per annum, out of which they were obtaining at present barely 200,000 tons. It was suggested that new Government plant should concentrate on the production of billets in order to supply the requirements of re-rolling mills all over the country.

As regards the consumption of finished steel, the concensus of opinion was that the demand during the next three years might be estimated at 2 million tons per annum, although the long term target might be placed at 2·5 to 5 million tons as proposed in the Steel Panel Report four years ago.

The expansion schemes of the main producers disclosed that the implementation of such schemes would increase the installed capacity by about 450,000 tons. The total cost of these expansion schemes was estimated at about Rs. 330 million. The needs for financial assistance by Government for the successful implementation of these projects was stressed. It was also stated that the Steel Corporation of Bengal had put forward a scheme involving further expenditure of Rs. 170 million, which would increase the steel production of that company to 850,000 tons of finished steel and make available an additional quantity of 200,000 tons of pig iron. Early in 1948, the company submitted applications for a loan to meet expenditure on renewal and replacement of machinery in the Indian Iron and Steel Co. Ltd. and on expansion schemes of both this company and the Steel Corporation of Bengal Ltd.

The loan of Rs. 50 million asked for is to be used in the case of the Indian Iron and Steel Company, on capital works in progress such as conversion of coke oven batteries, construction of sulphuric acid plant, boiler, coke oven battery, auxiliary equipment in connection with the above and certain work not yet begun *i.e.,* 2 boilers with coal and ash handling plant, coal washing plant, and auxiliary services. In the case of the Steel Corporation of Bengal, the loan asked for was for the erection of certain mills, a melting shop, a scrap yard and purchase of machinery.

The above measures were designed to increase the production of finished steel by 200,000/250,000 tons.

In view of the recommendations of the technical experts and in accordance with the policy laid down in Government's statement of industrial policy to give all facilities for reasonable expansion to existing works in certain industries including the steel industry, Government have decided to advance against a mortgage over the companies' entire property valued at over Rs. 160 million a loan of Rs. 15 million to the Indian Iron and Steel Company and Rs. 35 million to the Steel Corporation of Bengal. Not only will the additional production envisaged above will help to bridge materially the gap between the demand and supply but may also bring down the cost of production of the latter firms by Rs. 25 per ton.

Ship Building Industry—The Vivagapatam ship-building yard of Messrs. Scindia Steam Navigation Company is the only one in India which can build ocean-going ships. Scindias have spent about Rs. 56·4 million on the construction of the yard. As the Company could not raise funds ot the extent of Rs. 80 to 100 million required for developing the yard, they approached Government with the proposal that the latter should take over their undertaking at Vizagapatam with all its commitments at the cost which the Company had actually incurred for the purpose. Under the accepted industrial policy, ship-building is one of those industries, the establishment of new units of which will be the exclusive responsibility of the State, except where the State itself finds it necessary to secure the co-operation of private enterprise; but the existing undertakings will be allowed to develop for a period of ten years during which they will be given all facilities for a period of ten years for efficient working and reasonable expansion. The proposal of Scindias was considered in the light of the above policy and in view of the inability of Scindias to run the yard, Government agreed in principle in January 1949 to acquire the yard on the basis of valuation by naval experts. A French Firm of Naval Engineers was accordingly appointed to advise Government in assessing the value of the yard. The experts have submitted their report which is under consideration by the Government of India.

On account of the difficult budgetary position, Government decided in the beginning of 1950 not to take over the Vizagapatam Yard immediately. In order however to keep the yard going an order for three cargo ships of 8,000 tons each at a total cost of Rs. 19·35 million was placed with the Scindias on Government account. These ships are now under construction and are expected to be ready for delivery in 1951. It has also been decided to place with Scindias a further order for three ships on the same conditions as before for the same reasons. In addition to this, it is proposed to advance a loan of Rs. 1 million to Scindias for the construction of the third berth in the yard.

A provision of Rs. 20·5 million has been made on this account in the Budget for 1951-52.

Measures to Develop Overseas Shipping—Government had helped Indian Shipping Companies to become full members of the Shipping Conference controlling the India/UK/Continent, India/North America, India/Australia and India/Malaya trades. In order to facilitate the entry of Indian shipping into all the important overseas trades and to assist in solving the difficulty experienced by Indian shipping companies in raising the necessary capital, Government have announced their scheme for the setting up of Shipping Corporations on a state-cum private ownership basis. The first Shipping Corporation was registered in March 1950 with an initial capital of Rs. 20 million and has been functioning since then. Necessary assistance was also being given to Indian shipping companies for acquisition of additional tonnage, by furnishing information regarding availabilities and arranging liberal release of foreign exchange.

The services of our diplomatic representatives abroad are also freely made available to Indian shipping companies interested in acquiring fresh tonnage. Government were also using their good offices to ensure that Indian companies operating in the overseas trades got their first share of cagoes.

The Indian shipping companies, *viz.,* Scindias and the Indian Steamship Company apart from the Eastern Shipping Corporation, are at present operating in the overseas trades, with a total of about 176,000 gross registered tons of shipping.

The Scindia Steam Navigation Company and the India Steamship Company are operating in the India/UK Continent trades and the former also in the India/North America trade. The Eastern Shipping Corporation is operating in the India/Australia and India/Malaya trades.

Aircraft Industry—The only Aircraft factory in India at Bangalore is government-sponsored in which the Government of India have major interest. This factory is making good progress in production and development. Over-haul and repairs constitute the bulk of factory's activity. An entirely new type of work undertaken by the Aircraft Factory is the building of all-metal single and double decker bus bodies for the State transport authorities of West Bengal, Delhi and Bombay.

Mathematical Instruments Manufacture—The Mathemetical Instrument office at Calcutta has been manufacturing mathematical instruments for many years for Government Survey, Geological and other departments. It scope has been greatly enlarged within recent years and sales of the instruments manufactured at the office have increased appreciably. The office has developed and manufactured among other important instruments, profile projectors, glass absorption cells, special hydrometer sets, special mercury thermometers and stainless steel mirrors and slits.

INDIA'S FOREIGN POLICY

Since August, 1951, when India gained her independence, she has been brought into direct relations with other free nations of the world. This conduct of her foreign relations called for a declared policy and a trained diplomatic service. Hence a Ministry of External Affairs and a permanent cadre of officers destined for the Foreign Service were created. To-day, India maintains abroad twenty embassies, sixteen legations, seven high commissions, fourteen consulates, five commissions and ten missions and agencies.

Commonwealth Relations—As soon as freedom was won, all hostility to Britain was brought to an end. The effect was that India was invited to remain a member of the Commonwealth even when she became a Republic. So members of the Commonwealth at a conference in London in 1949 agreed to allow India the unique position of becoming a republic within the Commonwealth, enjoying preferential treatment in matters of civic rights and trade without her citizens being subjects of His Majesty the King. The British Parliament passed an Act to accomodate Republican India within the fold of the Commonwealth. This Act provides the existing laws in force in the United Kingdom and the Colonies, should with adaptation, where necessary, continue to apply in relation to India and persons and goods connected with India as they would have if India had not become a republic.

Basic Principles of India's Foreign Policy—The Foreign Policy of India is developing gradually. Indian Government's policy can be summed up as follows:—

(1) Neutral and independent foreign policy.

(2) Non-alignment with any of the two groups between which the world is divided to-day.

(3) Knitting together the South-East Asian countries for mutual economic and other interests.

(4) Contributing to world peace wherever and whenever possible.

(5) Championing the cause of the weak, even at the risk of estranging vested interests.

(6) Making the best use of United Nations Organisation for the purpose for which it was created.

(7) Establishing diplomatic contacts with all leading countries in the world so that India may know and be known in all the four corners of the world.

Foreign Policy in relation to other States—(1) India unequivocally condemned aggression in Korea and she advocated the limitation of area of conflict and readmission of China into the comity of nations. (2) India takes special interest in oppressed and under-privileged nations; hence Asia and Africa bulk large in her foreign affairs. Every progressive movements in these continents are always supported by India. India's contribution to Indonesia's brave struggle for independence and her support for the liberation of the people of former Italian Colonies are well known. (3) In the U. N. General Assembly India has always supported the replacement of Nationalist China by the Peoples' Republic of China who are the actual rulers of the State. (4) Racialism is another issue on which India takes a definite stand; she has strongly protested against the apartheid policy of South African Government and brought it before the bar of world opinion. (5) The Government of India recognises a special responsibility to those Indians who have settled in foreign countries. They suffer from many disabilities which arise out of immigration laws, labour legislation, political rights, nationalisation, colour bar and so on. The Government is doing its best to remove them.

Diplomatic Links—With the emergence of India as an independent Sovereign State, it became necessary for her to take active part in international affairs. She had also the obligation to look after large number of Indian nationals abroad and need to protect India's trade interests. To discharge these obligations, she had to enter into diplomatic relations with many countries. The following missions have been established since August 1947—

Embassies

Afganistan
Argentine
Belgium
Brazil
Burma
China
Czechoslovakia
Egypt
France
Iran
Italy
Nepal
Netherlands
Turkey
U.S.A.
U.S.S.R.
Indonesia
Thailand

High Commissions

Australia
Canada
Pakistan*
United Kingdom
Ceylon
South Africa†

Legations

Iraq
Germany
Portugal
Sweden
Switzerland
Ethiopia

Special Missions

Japan
Malaya
Sikkim
Tibet

Consulates General

Pondicherry
San Francisco
Denmark
Goa
Indo-China
Shanghai
Manila
Jedda

Consulates and Vice-Consulates

Medan (Indonesia)
Hanoi (Indo-China)
Jalalabad (Afganistan)
Kandahar (Afganistan)
Zahidan (Iran)

Commissioners

British East Africa
Br. West Indies
Fiji Islands
Mauritious
Aden

Agencies

Kendy (Ceylon)
Kuala Lumpur (Malaya)
Wellington (N.Y.)

---

* With two Deputy High Commissioners at Lahore and Dacca.
† Now in abeyance.

Indian Foreign Service—Steps have been taken to recruit proper and efficient men for the Indian diplomatic service. They are recruited through Federal Public Service Commission, by transfer from other services, such as I.C.S., I.P.S. and the Armed Forces. Special Selection Board also selects men for the foreign service from princes, public men, business men and lawyers, who are over-aged and would not ordinarily qualify for appointment.

Wireless Link with Indian Embassies Abroad–A direct wireless communication link between the Government of India and the offices of Indian envoys abroad is now being established. A multi-address broadcast service directed to Indian diplomats overseas by the Government of India's External Affairs Ministry has been introduced for expeditious supply of news relating to Government of India's activities and for broadcasting communiques and providing embassies with correct background of developments and trends in India. From New Delhi, the Government of India broadcast twice a day news-items of Indian envoys and High Commissioners.

ABOLITION OF ZEMINDARI AND TENANCY LEGISLATION

Five Part A States—*Madras, Bihar, Assam, Uttar Pradesh* and *Madhya Pradesh* have passed legislation for the abolition of Zemindari.

In Orissa a bill is pending in the State Assembly for its abolition. Bombay has abolished a number of tenures like Mehwari, Tabigdari, Khoti and Maleki.

In Part B States—*Madhya Bharat, Hyderabad, Saurashtra* and *Mysore* have taken steps to abolish zemindari and jagirdari system. *Jammu* and *Kashmir* has passed the Big Landed Estate Abolition Act, 1950 for the abolition of intermediary interests in land and for the transfer of land to the tiller.

Tenancy Acts have been passed in many states giving greater security to the tenants and tenant-landlord rights have been regulated. Economic holdings have also been created. The main features of tenancy legislation in recent years have been to encourage personal cultivation and the prevention of landlordism. Efforts have been made in several states to simplify the bewildering variety of legislation on tenures and extending the benefits of fixity of tenure and fair rents to tenants.

Recently acts have been passed in Bombay, Punjab, and Pepsu which permit compulsory consolidation of scattered holdings.

Gradual process of nationalisation is being slowly encouraged. Acts have been passed for reclamation of new land and intensive cultivation of lands already under the plough. Steps are being taken by governments to prevent losses through pests and disease.

INDIA'S FOREIGN RELATIONS

I. GENERAL REVIEWS

Fundamentals of India's Foreign Policy—Peace is India's dominant urge, says Pandit Nehru in New Year's Day broadcast (1951). In India's foreign policy there is a sincere desire to help in the maintenance of peace in the world. India is not a pacifist country and has an army, navy and air force. "If danger threatens us, we shall use them" declares Pandit Nehru. India does not like to join any power blocs.

India does not seek domination over others and "our sole object is to be left in peace to ourselves to solve our own problems and, where possible, to help and co-operate with others. In doing so, we try not to be swept by passion and anger and so maintain that temper of peaceful approach. The basic object of India's foreign policy has been the maintenance of friendly relations with all nations of the world." The response which India received during her threatened food crisis in 1951 was an indication that these friendly intentions were reciprocated by other countries. Pakistan however endeavoured to dissuade America from helping India with food loans.

As the threat of famine developed in Bihar during the early part of 1951, India started an assiduous search for food supplies all over the world. India sought the assistance of all nations but refused to accept food aid attached with political strings. The response was hopeful and significant. Almost all countries expressed their sympathy at India's distress and many countries sent help. The U.S.A. granted a wheat loan of two million tons and this in addition to the large quantities of American wheat purchased by India. China and Russia offered foodgrains to India and she bought food from these countries. Britain provided shipping facility despite her difficult shipping position; Canada, Australia, Burma, Thailand, Middle-East and South-East countries and many European and South American countries sent or promised to send food help to India.

India and Far East—The Far East Policy put India's foreign policy to test and again indicated that it was being conducted in the right direction. A delicate situation developed in the Far East with the invasion of South Korea by the North Korean forces. India in keeping with her ideals of peace and neutrality has piloted well her policy in Korean affairs and she has kept aloof from power politics that is now being waged in Korean front. India realised that Korea was only one of the symptoms of the tension which prevailed in the Far East and which if not eased, might lead to global war. In her view, it was not enough to end the hostilities—although this was no doubt the immediate task—but to go a step further and try to bring about a more permanent settlement which would prevent other conflicts breaking out. This purpose in India's view could not be achieved without the participation of the party chiefly concerned, that is, China. While, therefore, India supported the United Nations' action, she appealed at the same time for the admission of the People's Republic of China in the United Nations, or for the creation of an order to make it possible to bring all the parties concerned to the Conference table. Unfortunately, this appeal did not succeed.

An opportunity occurred again for a peaceful approach to the Far East when the forces of the United Nations reached 38th parallel towards the end of 1950. At that stage North Korean forces had been totally disorganised by the United Nations' intervention and it appeared that before the armed conflict spread further north, it was desirable to find out a settlement by negotiation. India was also apprehensive that if such peaceful possibilities were not explored, China might decide to intervene in the Korean war. Once again, India's advice went unheeded; the sphere, if not the area of conflict, was enlarged by the intervention and joining of Chinese volunteers, and an opportunity for negotiating peace was lost by the United Nations.

Although India's apprehensions were proved right, her suggestions for the attainment of peace let loose on her a spate of bitter criticism in many parts of the world which unfortunately has subsequently coloured to some extent world opinion on Indo-Pakistan matters. India however continued in her own small way to strive for peace. When the branding resolution came before the U.N.O. declaring China as a aggressor nation in Korea, India dissociated herself from it on the ground that if China was branded an aggressor, further possibilities of negotiating peace would recede.

Prime Minister Nehru stressed once again that if peace was to be preserved, provocation should be avoided, that cease fire should take place in Korea with a demilitarised zone and that China should be given an equal voice in the solution of the problems which concerned her most. Although this advice again went unheeded, cease-fire talks have at last begun; although no definite conclusion has yet been reached over the talks in Korea.

India's Himalayan Neighbours.—The fourth year of Indian independence coincided with a period of profound changes for India's Himalayan neighbours. Nepal which had been segregated from the democrattic upsurge of Asian nationalism for many generations, underwent a comparatively rapid but almost bloodless revolution. The revolution was touched off by the King of Nepal taking refuge in the Indian Embassy at Katmandu, following differences of opinion with his Government in the matter of political reforms. Subsequently, he sought asylum in India. Following the King's departure from Katmandu, the Nepali Congress rose in arms and captured several places. Fortunately, after prolonged discussions with India, the Government of Nepal ultimately agreed:

(*a*) that His Majesty King Tribhuvan whom the Nepal Government had deposed should return to Nepal as the constitutional King of Nepal;

(*b*) that a Constituent Assembly should be summoned as soon as possible to frame a constitution for the country; and

(*c*) that an interim cabinet with popular representatives should be formed immediately.

The emergence of a democratic form of Government in Nepal has inevitably been accompanied by various stresses and strains but the course has now been set for India's neighbour which has begun to march steadily on the path of democratic progress. In May 1951 the Prime Minister of Nepal and certain Cabinet Ministers sought the advice of Sri Nehru and, as a result of their meeting, complete agreement was reached that the Nepal Cabinet should work in co-operation and progressive spirit.

For Tibet too the period was one of crisis and change. In October 1950, Chinese troops entered Tibet and captured Chamdo, the capital of the Eastern Province of Kham and also certain other important places.

India urged upon the Government of China, at this aggression over Tibet, the desirability of a solution by a peaceful means. Subsequently very little fighting has taken place and recently an agreement has been signed between Tibetan authorities and the Government of the People's Republic of China which has greatly tightened China's hold upon Tibet. India has received an assurance from the Chinese Government that her interests in Tibet, cultural, commercial and political, would be duly respected.

With Sikkim India concluded a treaty in December 1950 under which Sikkim remains a Protectorate of India enjoying internal autonomy, but India continues to be responsible for its defence and external relations. Substantial improvement has been achieved in the Governmental machinery of Sikkim on the advice of an officer lent by the Government of India. Land reform has also been effected by the abolition of the system of lessees which coresponds to the zemindary system in India. Constitutional reforms are also under progress.

To India's Himalayan neighbour, Bhutan, has been handed over 32 sq. miles of territory in Assam known as Dowangiri in accordance with the Indo-Bhutan treaty of 1949.

India's Relations with S. East Asian Countries—India's normally cordial relations with her neighbours in South-East Asia were strengthened during 1951 by the signing of friendship treaties with Burma and Indonesia. India has advanced £1,000,000 to Burma under the agreement reached at the Commonwealth Prime Ministers' Conference held in Ceylon in January 1950.

Indonesian friendship has been cemented in various ways. Following Pandit Nehru's visit to Indonesia in June 1950, an Indian Trade Delegation went to that country in September with the object of exploring possibilities of developing trade between the two countries. As a result of successful negotiations, a Trade agreement was signed on January 20, 1951, which envisaged a three-fold increase in the volume of trade between the two countries. In July 1951, Indonesia sent a goodwill mission of her air force to India. A number of Indonesian military officers are receiving training in India.

India's secular tradition which has been embodied in her Constitution is now appreciably recognised in South-East Asia. Viet Nam authorities recently dropped the identification of Indian emigrants as "Hindus, Muslims, Sikhs, etc." and now identify them simply as Indian nationals.

India and the Middle East—The Instruments of Ratification in respect of the Treaty of Friendship between India and Afghanistan were exchanged in Delhi on September 30, 1950. A cultural treaty has been signed with Turkey and a treaty of friendship in December 1951. The goodwill visit of Maulana Abul Kalam Azad to Turkey and Iran was an indication of India's desire to maintain friendly relations with the countries of the Middle East. Negotiations are at present going on for the conclusion of treaties of friendship or/and commerce between India on the one hand, and Muscat and Oman, Yemen, Syria and Egypt on the other.

The significant development in this part of the world during 1951 is the oil crisis in Persia behind which lies a great national awakening. India signified in no uncertain manner that she completely sympathised with Iran's desire to nationalise her oil resources. India however made friendly suggestions to Iran and to Britain that the dispute should be settled amicably by negotiation, so that Iran may prosper and the world may also benefit by her oil resources.

India and Japanese Treaty—India's main objective in the Far East—the lessening of tension which would lead to a settlement—also conditions her approach to the Japanese peace traty. India is anxious that the state of war with Japan should end as soon as possible and Japan returns once again as sovereign member of the comity of nations. India views that the Japanese peace treaty cannot be considered except in the context of the Far Eastern situation. India urged that the countries chiefly concerned in the Far East, including China, should be associated with the peace treaty and the terms of the peace treaty should receive the full accord of the countries of this region. Japan has strengthened her relations with India by establishment of three Japanese Trade posts in India in 1950.

India and Europe—The most significant event in India's relations with the nations of Europe was the decision of the Government of India to terminate the state of war with Germany from 1st January, 1951. India was the first country to take this step and this decision was followed by the establishment of a legation at Bonn, the capital of the Federal Republic of Germany.

While there has been no material change regarding the French and Portuguese pockets in India, certain other developments have taken place in connected matters. The treaty of cession of Chandernagore was signed in Paris on February, 21, 1951. The agreement to end the Portuguese Government's political patronage over Indian Catholic diocesses, known as Padrodo, was ratified at Lisbon in October 1950.

The European country with which India has the closest relations is Britain. India has maintained and strengthened this tie by retaining her Commonwealth association despite her Republican status.

This cordial relationship was however embittered to a degree by the persistent campaign of calumny carried on against India and her leaders by a few but vocal British citizens among whom were a number of officers who had served undivided India. These persons and a section of the press in Britain tried to build up barriers between the people of India and the peoples of the Commonwealth.

Relation with America—Despite differences of approach on certain world problems, the relations between India and the USA continued to be cordial during 1951. The assistance provided by the USA to India in the matter of food has won appreciation from India. India has also signed a general agreement for technical co-operation under the Point Four Programme.

The friendly relations existing between India and Canada were underlined by spontaneous offers of wheat which Canada made during the Bihar crisis. An agreement signed in Canada during the year provided for the annual admission to Canada for permanent residence of 150 Indian citizens.

Diplomatic relations at Embassy level were established with Mexico. Friendly relations have continued with the South American Republics.

Indians Overseas—The most important development affecting Indians overseas was the rejection by the Government of the Union of South Africa of the resolution passed by the General Assembly of the UNO in regard to Indians in South Africa. The South African Government went a step further by implementing the Group Areas Act. The atmosphere for a Round Table Conference proposed between South Africa, India and Pakistan did not materialise as South Africa followed a unilateral action in enforcing the Group Areas Act. India therefore considered that the proposed round table conference would serve no purpose, in view of the intransigent attitude of South Africa.

II. INDIA ENDS STATE OF WAR WITH GERMANY

The Government of India terminated state of war with Germany with effect from January 1, 1951. Termination of the state of war with Germany is not equivalent to the signature of a treaty of peace. Germany will however no longer be treated as an enemy, *de facto* or *de jure*. Termination of the state of war is without prejudice to (*a*) the declaration regarding unconditional surrender by the German Reich; (*b*) Allied agreements and declarations regarding control of machinery for Germany; (*c*) the Paris agreement of January 1946 relating to reparations; (*d*) ownership or control of German assets and property in Germany and abroad; and (*e*) other questions which must await the conclusion of treaty of peace. The Government of India has reserved the right to retain any money or property subject to control by virtue of trading with the enemy legislation or in the custody of any prize court, but no obstacle will be placed in the way of the acquisition of property after this date or of the immediate resumption of full commercial and financial dealings between India and Germany.

The Government of India for the present continues the suspension of the enforcement or settlement of contracts concluded before the war between persons in India and persons in Germany, but contracts concluded after January 1 will be in the same position as contracts concluded with persons in any friendly country and no obstacles will be raised in connexion with them by reason of the fact that a formal state of war has previously existed between India and Germany.

III. INDIA AND THE COMMONWEALTH CONFERENCE

The Commonwealth Conference held in London in the first week of January 1951 revealed India's independent stand in her foreign relations. The Commonwealth Conference met under a cloud created by the absence of Pakistan's Prime Minister, Mr. Liaquat Ali Khan, during the early part of the sitting of the Conference. Mr. Liaquat Ali Khan refrained from attending the meeting of the Commonwealth Prime Minister's Conference on ground that despite his best efforts he could not obtain the inclusion of the Kashmir affair in the agenda of the Conference. The original plan was that the conference should discuss foreign policy and the defence of the common interests of the members of the Commonwealth. It was never intended that a dispute between two members, such as the Kashmir issue between India and Pakistan, should form part of the agenda. Mr. Liaquat Ali Khan was so much committed to the people of Pakistan that he hoped that the Kashmir affairs would be settled early. However, later on the Pakistan Premier joined the conference on request by Mr. Attlee. The Kashmir issue was not raised formally in the conference, but was discussed informally with Pandit Nehru and Mr. Liaquat Ali Khan by Mr. Attlee and the Canadian Prime Minister without reaching any settlement.

Pandit Nehru pleaded for the recognition of the Communist China stating that she was now a force to be recognised. Britain reluctantly recognised Communist China following India, as she had trade interest in Hong Kong.

In the conference united defence plan among the Commonwealth countries were raised. The subject of concerted external defence proved difficult as India did not want to commit herself to such a scheme. To join the proposed Commonwealth Defence Plan means aligning more closely with an anti-Communist bloc of world powers, and any such step on the part of India would violently contradict her own stand of neutrality and non-alignment with power blocs. Nehru rejected such a defence plan, and the proposal did not materialise owing to opposition by a few other members. The Commonwealth Conference evinced India's independent stand in international relations consistent with her declared policy to remain aloof from power blocs. India has proved her independent stand by pressing for the recognition of the Communist China. Further, the absence of any Indian commitment to the common pool of military and industrial strength put off the idea of a united defence plan.

IV. INDIA AND NEPAL

In view of the threatening world situation, India has been following a policy best suited to maintain peace and order to her neighbouring countries so as to ward off internal troubles and revolutions. With that end in view she interfered in the affairs of Nepal in order to prevent her from falling a victim to communistic rise inside the country. At the insistence of India, the Nepalese authorities agreed to the return of King Tribhuvana, who had earlier fled to India. Nepal also agreed to set up a Constituent Assembly by the end of 1952 to evolve a constitution for the state. Members to it will be elected on adult franchise. Meanwhile there was an interim Government with adequate representation of all popular political parties. This development in Nepal marks a silent revolution from the autocratic rule of the Ranas. The 100-year-old agreement between the King and the Prime Minister ceased to operate.

India's motives in Nepalese affairs may be diverse, political as well as economic. Politically, India wants an active concern in the affairs of all states on its frontiers, with a view to ensuring its own security. Nepal has great strategic importance to India and it is proper that India should have active concern in the fate of this country and India cannot allow her to be a pawn in the hands of world powers.

Economically, Nepal's importance is great. She has 6,000 square miles of forest in Nepal containing not only valuable timber for pharmaceutical and other uses, but also natural indigo and even natural jute. Quantities of rice and vegetables are also grown in Nepal which would assist in solving India's food problem. There are sulphurous springs, and oil has been seen on lakes and rivers, if not at Biratnagar, more certainly north and north-west of Katmandu. Continual gold washing from the Baraini river may indicate the presence of workable gold deposits. Other suspected minerals may include cobalt, antimony, silver, manganese and possibly jewels. The Ranas have permitted no exploitation by outside capital and no real exploration has been undertaken.

In the month of November, 1951, there was a crisis in the interim cabinet of Nepal as a result of which the Congress ministers of Shri Koirala resigned. The Rana was thus forced to give up his Prime Ministership. The King invited Sri Koirala to form a new cabinet which he did form, all ministers being taken from the Nepal Congress Party.

The premiership of Sri Koirala marks the exit of the Ranas from the Government of Nepal and opens up a new chapter in the history of Nepal.

V. INDIA AND KOREA

India took much initiative in framing the Arab-Asian resolution in U.N. on Korean peace talks. But this Arab-Asian resolution was defeated by the United Nations' passing the US resolution condemning China as an aggressor in Korea. The voting took place on January 31st, 1951 and was passed by 44 votes to seven, with eight abstentions. Earlier, a committee was created by the UN General Assembly on December 14, 1950, following a resolution by 13 Asian and Arab countries. Its members were Mr. Nasarolla Entezam of Iran, Mr. Lester B. Pearson of Canada and Sir Benegal Narsing Rau of India. After handing a copy of the Assembly's resolution to General Wu, the representative of People's Republic of China, who was then in New York, the committee went to work on the unified command of the UNO forces in Korea. The committee hammered out a eight points plan which they thought could be the basis of a satisfactory cease-fire. Among the more important points were: a 20 mile demilitarised zone extending across Korea north of the 38th parallel; withdrawal of all armed forces north and south of this zone; enforcement of the cease fire by a United Nations Commission.

To General Wu and to his Government in Peking, the Committee sent identical notes, for a discussion of the conditions for a cease fire. At the same time, the Committee asked the People's Government of China to instruct General Wu to prolong his stay in New York. When he dismissed the cease-fire proposal as a "trap of the US ruling circle", the Committee tried to keep its foot in Peking's door by sending one last cable on December 19th promising that a successful order be followed immediately by a conference which would include the People's Republic of China and which would attempt to settle "existing issues in the Far East".

The Committee waited two days. On December 21, 1950, Peking replied that the three man committee was "illegal", because the People's Republic had no hand in selecting it, and that its representative could not therefore deal with it. Two days later, Mr. Chou En-lai, Minister of Foreign Affairs in Peking, slammed the door in the Committee's face for good and all. The People's Republic of China, said Mr. Chou, will "carry on no negotiations with the illegal Committee. As far as Mr. Chou was concerned, the price for a cease fire was no less than the removal of the United States Seventh Fleet from Formosan waters, withdrawal of foreign troops from Korea and a seat in the United Nations for Peking.

That finished the hope for peace in 1950. Last week of December, Sir B. N. Rau read the Committee's report to the Assembly, concluding with its regretful statement that "no recommendation in regard to a cease-fire can usefully be made by it at this time."

VI. INDO-TURKISH TREATY OF FRIENDSHIP

On 14th December, 1951, India signed a treaty of friendship with Turkey, pledging perpetual peace and friendship. India's Ambassador in Turkey Mr. C. S. Jha and the Turkish Foreign Minister, Dr. Fuad Koprulu signed the treaty. The following is the text of the treaty:

The President of the Republic of India and the President of Turkey recognising the ancient ties of friendship which have happily existed between the two countries and desiring to co-operate in developing and perpetuating these ties in the interests of international peace and in the spirit of Charter of the UN., have decided to enter into a treaty of friendship with each other and to this end the treaty has been enacted.

1. There shall be perpetual peace and friendship between the Republic of Turkey and the Republic of India. The high contracting parties shall at all times strive to maintain and strengthen such peace and friendship and to promote and deepen the cordial relations between the peoples of their respective countries.

2. The high contracting parties agree to maintain diplomatic and consular relations with each other by means of diplomatic representatives and through consular representatives who shall reside in towns, ports and places in each other's territory as may be agreed to. Such diplomatic and consular representatives shall have, on a reciprocal basis, the same privileges and other immunities as accorded to such representatives of any other State.

3. The high contracting parties agree to strengthen and develop cultural ties between their respective countries and to assist each other as far as possible in industrial and agricultural progress.

4. *Reciprocal Rights*—The nationals of each high contracting party shall have on a reciprocal basis, in the territory of the other, subject to the laws and rules in force in that territory, the right of establishing themselves and of residence, going from and coming to and moving freely within that territory.

5. The nationals of each high contracting party shall have in the territory of the other, the right of access to the law courts and the assistance of the judicial machinery in the same way as the nationals of that party.

6. The high contracting parties agree to conduct their commercial relations as well as those pertaining to customs, navigation, aviation, cultural affairs, extradition, and other matters of interest to both countries, in accordance with such special agreements as may be already in operation or may be concluded hereafter between them.

7. *Disputes*—The high contracting parties agree to settle all disputes between them through the ordinary diplomatic channels and if no settlement is reached within a reasonable period, by such other peaceful means as both parties may deem most suitable.

8. Any dispute arising out of the interpretation of this Treaty shall be settled in first instance, by negotiation, and if no settlement is reached within a reasonable period, by such other peaceful manner as may be agreed upon.

9. The present Treaty shall be ratified at the earliest possible date in accordance with the constitutional processes of the high contracting parties and shall come into force 15 days after the exchange of the instruments of ratification which shall take place as soon as possible in New Delhi.

VII. INDO-INDONESIAN TREATY OF FRIENDSHIP

On March 3, 1951, a treaty of friendship was signed between India and the Republic of Indonesia in Djakarta. The term are as follows:

Article 1—There shall be perpetual peace and unalterable friendship between India and the Republic of Indonesia.

Article 2—Each of the contracting parties shall be able to appoint diplomatic representatives, consuls-general, consuls, vice-consuls and consular agents, who shall reside in towns, ports and other places in each other's territory where the corresponding representatives of other countries reside or in such other places as may be agreed to. They shall enjoy on a reciprocal basis all the rights, privileges, exemptions and immunities that are according to persons of corresponding status of other States.

Article 3—The two Governments agree that their representatives shall meet from time to time and as often as occasion requires to exchange views on matters of common interest and to consider ways and means for mutual co-operation in such matters.

Article 4—The nationals of either of the contracting parties shall have in the territory of the other party, subject to the laws and rules in force in that territory, the rights of establishing themselves and of residence, of going from and coming and of moving freely within that territory.

Article 5—The contracting parties will, as soon as possible, enter into negotiations for the conclusion of a comprehensive treaty or treaties of commerce and establishment.

Article 6—Any dispute arising out of the interpretation or application of this treaty or one or more of its Articles shall be settled in the first instance, by negotiation, and if no settlement is reached within a period of six months from the commencement of negotiations, by arbitration in such manner as may hereafter be determined by a general or special agreement between the contracting parties.

Article 7—The present treaty shall be ratified and shall come into effect on the date of the exchange of ratifications which shall take place as soon as possible in New Delhi.

VIII. INDO-FRENCH TREATY RECOGNISING DE JURE TRANSFER OF CHANDERNAGORE

On February 1, 1951, French and Indian representatives signed a treaty recognising the de jure transfer to India of Chandernagore, former French possession, 21 miles north of Calcutta. The signing followed a referendum held on June 10, 1949, "which expressed the will of the people of Chandernagore to be linked up to the Indian Union. A clause of the treaty ensures the safeguard of French cultural tradition in the old settlement." The *de facto* transfer took place on May 2, 1950.

The main provisions of the treaty are:

France transfers to India in full sovereignty the territory of the free town of Chandernagore. French subjects and citizens of the French Union domiciled in Chandernagore will, on the coming into force of the treaty, automatically become Indian citizens.

Persons desiring to retain French nationality will be given six months in which to make a declaration to this effect. Such persons will be permitted by the Government of India to transfer their assets and property to any French territory where they may wish to reside permanently on application to the competent Indian authorities.

The French Government will transfer all state and public owned properties lying in the territory of Chandernagore to the Government of India. Financial and monetary issues arising out of the transfer are to be examined by a mixed Franco-Indian commission, which has already been set up (its recommendations are subject to the approval of the two Governments) . Appropriate Indian authorities will execute judgements and decrees passed before May 2 by French judicial authorities having jurisdiction over Chandernagore. Appeals arising out of judgments or decrees passed by French authorities having jurisdiction over Chandernagore before May 2 shall, subject to the law of limitation in force immediately before that date, be disposed of as though the territory had not been transferred to India. Appeals pending on May 2 shall be dealt with by the authorities before whom they were pending (the decisions regarding these appeals will be executed by the appropriate Indian authorities).

The French Government will be allowed to remove, in consultation with the Government of India, such archives as have a general historical interest (those archives however which are of interest to the local administration of Chandernagore will be placed at the disposal of the Government of India). The Government of India will take over the civil servants and employees of the free town of Chandernagore and those of the French establishments in India who were serving in Chandernagore on May 2, 1950. Such employees or civil servants can exercise, within three months of the coming into force of the treaty the option to serve the French administration. Such civil servants and employees whom the Government of India do not desire to retain, will be given three months' notice of termination of their services, within one month from the date of the coming into force of the treaty.

IX. INDIA AND THE JAPANESE PEACE TREATY AT SAN FRANCISCO CONFERENCE

India's abstention from the San Francisco conference where Japanese Peace treaty was signed raised serious repurcussions inside and outside the country. India did not join the conference nor was she a signatory to that treaty. John Foster Dulles, President Truman's special representative on the Japanese Peace Treaty negotiations observed that India's refusal to sign the San Francisco Treaty was akin to the Chinese Communist line of "Asia for Asiatics", but such a policy would make it "Asia for Russians".

A White Paper containing India's reply, dated August 28, to America for not joining the San Francisco conference, fully explained India's stand on the matter. While India claims the right to reject an unsatisfactory treaty, says the reply, she does not "wish to come in the way of any nation which is satisfied with the terms of the present treaty and is prepared to sign it." Nor does the Government of India intend to propose to Japan "a treaty of peace which would in any way be controversial or which run counter to the provisions" of the draft to be signed at San Francisco. The following is the test of India's reply:—

"The Government of India welcomes the assurance that the overriding desire of the Government of the USA is peace in Asia. The Government and people of India have striven to this end to the best of their ability, because they consider peace of paramount importance to the world and, more especially to the countries of Asia, which have suffered for many generations under alien domination.

"Nothing could be more disastrous for Asia than war, which would make impossible an early fulfilment of the hopes of development that fill the minds of the people of this great continent. It is with this single aim of preserving peace that the Government of India have considered every problem with which they have been confronted. In the task of maintaining peace and developing the nations of Asia, they would always gladly cooperate with the USA and with other countries.

"The Government of India also welcome the assurance of the US Government that they do not want to be a party to colonialism or imperialism.

Opposition to colonialism and imperialism has been the basis of India's struggle. Having experienced the burden and the injury that flow from both, the people of India are convinced that continuance of them in any form and in any part of the world cannot lead to peace or progress or to the happiness of the people concerned. World peace can only be assured when the domination of one country over another ceases. Turning to certain specific points relating to the treaty which arise out of the reply of the US Government, the Government of India wish to make the following observations:

(1) The US Government have expressed the belief that their view of the proposed treaty is shared by the Government and the people of Japan. The Government of India regret that their appreciation of the situation does not tally with that of the US Government.

(2) Commenting upon the Government of India's suggestion that the treaty should restore in full Japan's sovereignty over territories of which the inhabitants have a historical affinity with her (Japan's) own people and which she has not acquired by aggression from any other country," the US Government point out that the Government of India have never questioned the Potsdam surrender terms during the 5½ years during which India served as a member of the Far East Commission, which was established to ensure the fulfilment of those terms. In suggesting the return of the Ryuku and the Bonin groups of islands of Japanese sovereignty, the Government of India are not challenging the Potsdam terms of surrender. As the US Government have themselves pointed out, those terms left room for the addition, by agreement of some minor islands to the islands of Honsu, Hokkaidu, Kyushu and Shikoku, over which Japan was to be allowed to exercise sovereignty.

Nor have the Government of India any intention whatsoever of applying disimilar principles to different parts of territories which have a historical affinity with Japan and which Japan did not wrest from any of its neighbours. If they excluded the Kurile islands from the scope of their suggestion, it was because the Yalta agreement provided, without any reservation, that the Kurile islands shall be handed over to the Soviet Union. The Government of India cannot be held responsible for any inconsistency which is the result of the Yalta agreement.

(3) In discussing the Government of India's views regarding defensive arrangements to be made by Japan, the Government of the United States describe them as trantamount to leaving Japan defenceless against proved aggressors. The Government of India fail to find any warrrant for such a conclusion from anything that they have said. The draft treaty recognises that Japan as a sovereign nation possesses the inherent right of individual or collective self-defence and that Japan may voluntarily enter into the collective security arrangements. Adequate provision is thus made for Japan independently to make whatever arrangements she considers necessary for her self-defence as soon as she has signed the peace treaty, and it is not clear to the Government of India why there should be any 'period of total defencelessness' for Japan.

(4) In regard to Formosa, the Government of India have suggested that in keeping with international obligations, it should be stated clearly in the treaty that it would be returned to China. That would determine the future of Formosa leaving the time and manner of such return to be settled at a future date. The Government of India have been and are of

opinion that a declaration that Formosa shall be returned to China will help in creating conditions for a settlement in the Far East. But the Government of India have at no time insisted or even suggested that a Japanese peace treaty should be deferred until there is final agreement with respect to the future of Formosa.

(5) The Government of India have been anxious that a peace treaty with Japan should be signed and the military occupation of Japan terminated at the earliest possible moment. All that they have urged is that what they consider to be imperfections of a major character in the draft treaty should be removed, so that the terms of the treaty may promote the prospects of a peaceful settlement of outstanding issue in the Far East. The Government of India do not wish to come in the way of any nation which is satisfied with the terms of the present treaty and is prepared to sign it. They only claim for themselves their inherent and unquestionable right not to sign a treaty with the terms of which they are not fully satisfied. Of their own resolve to establish the friendliest possible relations with Japan, they have already given proof for, as they informed the Government of the USA, they intend to terminate the state of war with Japan and to establish normal diplomatic relations with her as soon as possible.

(6) The Government of India have no intention of proposing to Japan a treaty of peace which would in any way be controversial or which would run counter to the provisions of the draft treaty of peace. Their action in not being represented at the San Francisco conference and in making a separate treaty of peace with Japan, should not therefore adversely affect either the friendly relations that exist between the Government of India and the Government of the United States or the cooperation of the two Governments in everything 'which is practical and fruitful for peace.'

(7) The Government of India hope that the observations made in the foregoing paragraphs reveal a unity of outlook between them and the Government of the USA in many vital matters that affect the future of the people of Asia and of humanity in general.

The differences that exist between them are differences of method and approach. Such divergencies of opinion are bound to occur even among the friendliest of nations and should not be allowed to cause resentment that might come in the way of mutual understanding and community of effect."

The US Secretary of State, Mr. Acheson, declared at this time that any separate treaty signed by Japan with countries such as India who did not sign the San Franciso treaty must conform to that treaty's general provisions. Japan could sign a peace treaty with the communist China, but Japan should not sign any treaty with any other country which was different from or contained more favourable terms than the Anglo-American treaty. If India signs a peace treaty with Japan, that treaty must not be more favourable and must conform to the general provisions of the San Francisco treaty.

X. RECENT DEVELOPMENTS IN INDO-USA RELATIONSHIP

Mr. Dulles in a recent speech remarked that "India has refused to sign the Japanese peace treaty because she did not believe that it would be possible for Americans to stay there and have friendly cooperation with the Japanese as equals." "India in this particular matter seemed to align herself with the Chinese Communists line which is that there cannot be Asia for Asiatics, unless all westerners are rooted out. That kind of Asia would of course not be "Asia for Asiatics" but "Asia for Russians." But that is apt to happen unless we demonstrate a capacity to treat the Asians on a basis of equality."

India however has made her position clear in the statement mentioned earlier. India holds that she did not join the San Francisco conference on the following grounds:

(1) The terms of the treaty did not concede to Japan a position of honour, equality and contentment among the community of free nations; and (2) the treaty is not so framed as to enable all countries, especially interested in the maintenance of a stable peace in the Far East, to subscribe to the treaty, sooner or latter.

Fresh Efforts for Indo-US Amity—Notwithstanding the domestic stress of the general elections, more than the usual interest attaches at present in India to the country's relations with the USA, which have frequently featured in recent public discussions. An important reason is the attention which the new American Ambassador, Mr. Chester Bowles, has drawn to the problem from his arrival in Delhi nearly three months ago. Since his arrival, there has also been a change in India's diplomatic representation in Washington, and belief is growing stronger that there is an attempt on both sides to promote greater understanding and appreciation of each other's point of view. Mr. Bowles's appointment is being linked with the speedy conclusion of the recent Indian agreement with Standard Vacuum Oil Company for setting up a refinery in Bombay.

Apart from economic aid, Indian opinion attaches greater importance to a political understanding with the USA because even for the purpose of attracting American capital it is considered necessary here to increase American appreciation of India's foreign policy, particularly in relation to Asian affairs. In her desire for closer American friendship, India has recently given evidence of her willingness to accommodate US opinion without compromising her own independence of policy and action. Most of the evidence is recorded in the proceedings of the UN General Assembly since November, 1951. On November 26, Sir Narsing Rao moved an amendment to the three power resolution on disarmament sponsored by France, the UK and USA, and the changes proposed by Russia. Admittedly India's amendment was essentially a repetition of the resolution on the same subject which India moved last year, but the fact remains that it suggested a different approach to the one put forward by the three major powers. Yet, within three days India had accepted a second resolution moved by Iraq, Pakistan and Syria, which had the support of France, the UK and the USA. This was no accident.

On December 4, 1951, the Indian delegation supported the Western Powers' proposal before the UN Ad Hoc Committee to hear representatives of East and West Germany on the possibility of free and secret elections in the two sectors of the country. India's support was given despite Russian opposition to the proposal. This again indicated that India was prepared to take a bolder step in favour of the Western democracies than mere abstention. It is being realised that there has been a shift of emphasis and changes of approach and technique in India's international relations, in favour of the Western Powers. As long as the Government refuses to sacrifice the basic principles on which her foreign policy rests, namely, independence, integrity and justice, it can count on the unstinted support of a vast majority of the Indian people.

XI. INDO-US FOOD LOAN AGREEMENT

The Wheat Loan Agreement between India and the USA was concluded on June 15, 1951, providing for the procedure of administering the loan agreement and repayment by India of the $190 million loan envisaged in it. The US Congress passed an enactment, the India Emergency Food Aid Act for this purpose and the loan agreement was reached between the Government of India and the Export-Import Bank of Washington, an Agency of the USA. A line of credit of not exceeding $190 million has been established in favour of the Government of India by the Export-Import Bank. Simultaneously, the Government of India have executed in favour and delivered to Eximbank a promissory note in the principal amount of $190 million or so much thereof as may be advanced under the credit so established. According to the Promissory Note executed by the Government of India they have promised to pay to the Export-Import Bank of Washington, the principal sum of $190 million or so much thereof as may be advanced against the Promissory Note executed by India in instalments and to pay interest at the rate of 2½ per cent per annum on the unpaid principal balance outstanding from June 30, 1952; the interest being payable semi-annually from December 31, 1952. The payment of the principal in semi-annual instalment will begin from June 30, 1957 and has to be completed by June 30, 1986.

All payments are to be made at the office of Export-Import Bank at Washington, in lawful money of the USA, unless the parties mutually agree otherwise. India and the USA have further concluded an agreement for duty free entry and defrayment of inland transportation charges of relief supply and packages.

The Export-Import Bank has been advised by the Administrator for Economic Cooperation, to extend assistance to the Government of India on credit terms in an amount not exceeding $190 million for financing the acquisition of such commodities as are approved by the Administrator for the purpose of providing food to meet the emergency need arising from the extraordinary sequence of flood, drought and other conditions existing in India in 1950.

The Agreement further lays down that if the Administrator or Eximbank shall so request, the Government of India will at any time or from time to time enter into negotiations with the objective of modifying this agreement so as to provide for the payment of all or any part of principal and interest by the delivery to the USA of such materials, required by the USA as a result of deficiencies or potential deficiencies in its own resources, as may be designated by the Administrator or by Eximbank, at such prices, at such time and otherwise on such terms as may be mutually agreed upon.

The letter of Notification issued in this connection by the Economic Cooperation Administration and accepted by India states that "the Government of India will facilitate the immediate and continuing transfer to the United States of America of materials originating in India, which are required by the United States of America as a result of deficiencies or potential deficiencies in its own resources, upon such reasonable terms of sale, exchange, barter or otherwise, and in such quantities, and for such period of time, as may be agreed to between the Government of India and th United States of America."

XII. INDO-USA AGREEMENT ON TECHNICAL CO-OPERATION ON RIVER VALLEY PROJECTS

An agreement was signed in New Delhi on September 15, 1951, between India and the USA under which the latter will furnish to India scientific and engineering services connected with river valley projects through the US Bereau of Reclamation. This is in pursuance of the General Agreement of December 1950, providing for technical cooperation between the two Governments.

The nature and the scope of the services to be rendered by the US Bureau of Reclamation will involve the study and analysis of scientific and technical engineering data, testing of materials, analysis of stresses and stability involving technical studies, construction and testing of hydraulic models and such other scientific and technical engineering services and advice as are commonly required to determine the adequacy of the designs or construction of structures for river valley projects. India may send her own engineers to the offices of the Bureau to present technical problems and data and to assist the Bureau generally in working out solutions.

LET US KNOW THESE FACTS

A U.N.E.S.C.O. report on "world communications" published on December, 1951 made these points:

Every day 224,000,000 copies of newspapers, 187,000,000 radio sets and 15,000,000 television sets supply the world with news and information.

Press—Britain has the highest proportion of readers with 600 newspapers sold daily for every 1,000 people.

Radio—North America leads in radio with 447 receiving sets for 1,000 people; in the United States every 1,000 people own 620 radio sets.

Films—Oceania is best provided with cinemas with 140 seats for every 1,000 people.

The most frequent cinemagoers are the Israelis; on an average each Israeli goes to the cinema 38 times a year.

* * * * * * *

World's 2,400 Millions—The world's population was about 2,400m in mid-1950, according to a U.N. Statistical Office report. It gives these figures for the main areas of the world: Africa 198m. North America 216,300,000, South Africa 111,400,000, Asia excluding the USSR 1,272m. Europe excluding the USSR 396,300,000, Oceania 12,900,000, the USSR 193,000,000.

* * * * * * *

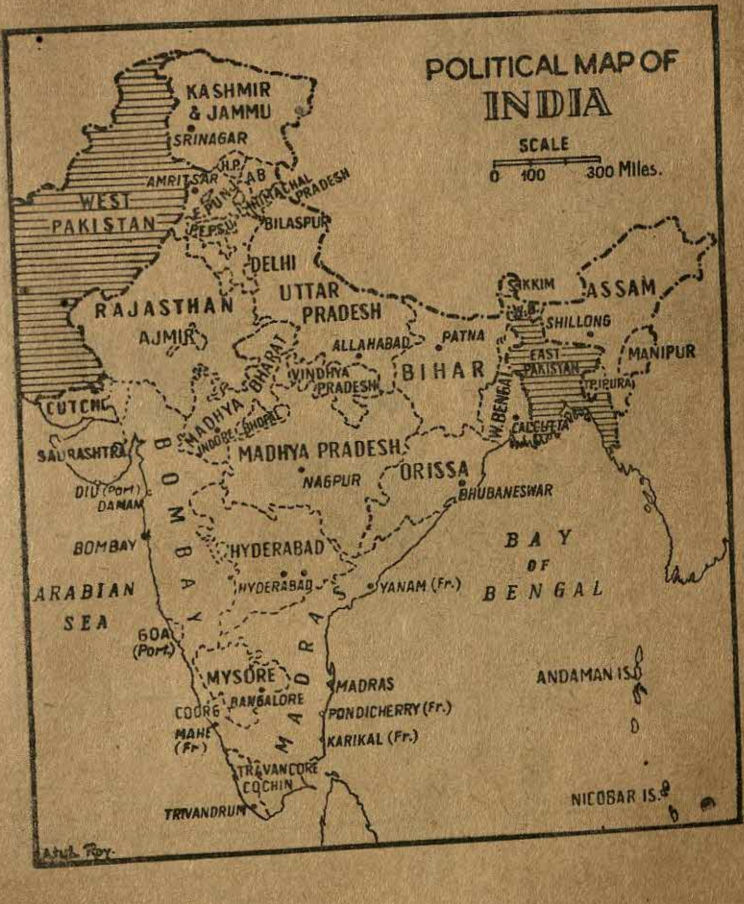
Figures of Income per Person—Asia with over half the world's population has only a tenth of the world's national income, according to a United Nations report issued in December, 1951.

North America on the other hand, with less than ten per cent of the world's population accounts for nearly forty-five per cent of the world's national income. In other words, an average person in North America earns twenty times as much as his Asian counterpart.

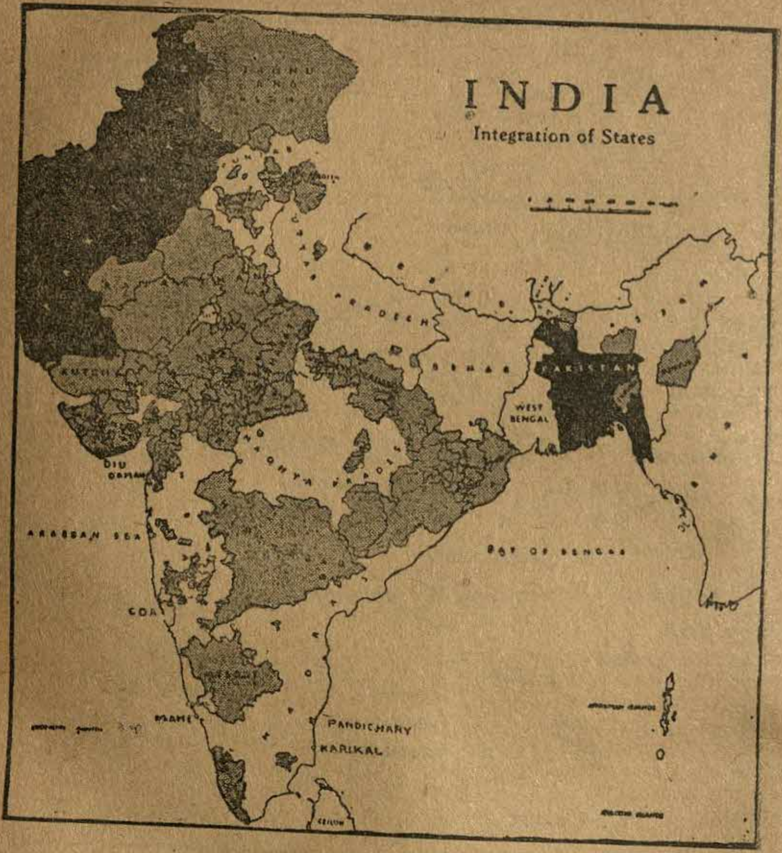
According to the report the following are the approximate figures of income per person for the various geographical areas of the world:

North America—1,000 dollars; Oceania—560 dollars; Europe—380 dollars; Soviet Union—310 dollars; South America—170 dollars; Africa—75 dollars and Asia—50 dollars.

INDIAN STATES



INTEGRATION OF INDIAN STATES



STATES IN INDIAN UNION

ASSAM

This north-eastern frontier State is almost bottled up between Bhutan and Tibet in the north, Burma on the east and East Pakistan on the west, areas of Manipur in the east and Cooch Bihar and Tripura on the west thrown in, except for a narrow passage bordering along and through Cooch Bihar. The 25 Khasi Hill States were merged with Assam on 26th January, 1950 to be known as Khasi-Jaintia Hill district and have added 6,027 sq. miles area. With the Khasi States, Assam continues to be governed through the Governor of Assam. She has an area of 54,084 sq. miles with a population of 9,043,707 in 1951. Under the referendum, as qualified by the Radcliffe Award of 1947, the State has lost to Pakistan almost the whole of the district of Sylhet. This State has the largest number of tribal people of the Union constituting about 32% on the whole and about 12% in what were hitherto known here as the Excluded and Partially Excluded areas; and the Constitution has provided for the setting up "autonomous districts" and "autonomous regions" with District and Regional Councils for them.

Criss-crossed and skirted by hill ranges and forests, with the lower Himalayan ranges overlooking in the north, the territory has an abundant rainfall, normally about 100 inches, which with the maximum of 570 inches makes Cherrapunji the wettest spot in the world. This makes agriculture and plantation comparatively easy and worthwhile for the people and planters, rice and tea being the most important crops. In tea particularly she holds about half the acreage of the Indian Union. Sugarcane, cotton, jute, tobacco, rape and mustard and silk are also grown in small quantities. Her forest which occupy about 12·2 p.c. of the area after years of unplanned denudation yields large quantities of timber and other forest products and gives occupation to many. Among mineral resources, coal, petroleum and kerosine alone have as yet been exploited; the latent resources, which are said to be large indeed, being not even fully prospected. The climate of Assam is marked by coolness and extreme humidity. The heavy and long-continued rain keeps the temperature comparatively moderate. Assam enjoys an unusually long and bracing cold weather. The spell of hot weather is very short. Assam is always famous for its *fauna*. It is the home of elephants, tigers, leopards, wild boars, buffaloes, bisons, etc. The reserve forest at Khaziranga at Sibsagar keeps rhinoceroses. Oil is produced at Digboi, near Tinsukia. Coal is produced at Margherita (near Digboi) and near Nazira.

The main cottage-industries of Assam are sericulture and handloom weaving. The three chief types of silk are *eri*, *pat* (white silk of mulberry worm) and *Muga* (a golden silk peculiar to Assam).

Assam has following districts—Cachar, Khasi and Jaintia Hills, Naga Hills, Lushai Hills, Goalpara, Kamrup, Darrang, Nowgong, Sibsagar, Lakhimpur, Garo Hills, Saidya Frontier Tracts and Balipara Frontier Tract.

Governor—HIS EXCELLANCY SRI JAIRAMDAS DAULATRAM.

WEST BENGAL

West Bengal has an area of 29,476 sq. miles with a population of 24,786,683 according to 1951 census. Cut into two separate unconnected blocks, the northern block consisting of the districts of Darjeeling and Jalpaiguri is bound on the east by Bhutan, on the north by Sikkim, on the West by Nepal and Bihar and on the south by East Pakistan while the southern block is bound on the north and east by East Pakistan, on the south by the Bay of Bengal and on the west by Orissa and Bihar.

West Bengal has now fourteen districts—Burdwan, Birbhum, Bankura, Hooghly, Howrah, Midnapur, Calcutta, 24-Parganas, Murshidabad, Darjeeling, Nadia, Malda, Jaipaiguri and West Dinajpur. This State has 272 police Stations, 93 towns and 34,249 villages in 14 districts.

The only Indian State that has merged with West Bengal on the 1st January, 1950 is Cooch Bihar which adds 1,318 sq. miles to her territory.

This is one of the most densely populated states of the Indian Union, with 839 persons per sq. mile as per 1951 census, has a tropical climate, rainfall averaging from about 68 inches in the plains to above 120 in the hills. The State is particularly devoid of forests. Generally speaking, the forest region of West Bengal is situated in the isolated northern part of the State, *viz.*, Darjeeling and Jalpaiguri districts. Only about 8·66 p.c. of the area is covered by forests.

In agriculture which gives occupation to the majority of the people, she has the third largest area under rice in the Union, the second in tea and the first in jute; some amount of gram, barley, linseed, mustard and rape, sugarcane, maize, cotton, tobacco and other crops are also grown here. Of the total cropped area, 88 p.c. is utilised for growing rice. After rice jute is the most important crop and accounts for 10 p.c. of the total cropped area. Bengali tea plantations covers an area of 170,364 acres and it lies in the districts of Jalpaiguri and Darjeeling.

Industry and commerce are however the biggest source of income. At present West Bengal has 90 jute mills employing over 310,000 people. The capital invested in the trade is about Rs. 48 crores. Bengal accounts for one-fourth of all India's coal production. There are 32 cotton mills in the State located within 16 miles of Calcutta. West Bengal has also the largest number of paper mills of any state in India. West Bengal has the largest engineering industry in India representing approximately 75 p.c. of the total all India output.

West Bengal's cottage industry is also considerable, the most important of which is cotton weaving. Other industries are bell-metal, hand-made paper.

Regarding trade over 40 p.c. of India's total sea-borne trade passes through Calcutta.

West Bengal has 2,462 miles of metalled and 8,652 of unmetalled roads. There are also several major trunk roads connecting with northern India, Madras, Bombay, etc. Calcutta's airport, Dum Dum is the largest in India. On an average take-offs and touch-downs total 85 a day with passengers over 700.

Governor—HIS EXCELLENCY DR. H. C. MOOKERJEE, PH.D.

BIHAR

Bihar is bounded on the north by Nepal, on the east by Bengal and East Pakistan, on the west by the Uttar Pradesh and Madhya Pradesh and on the south by Orissa. With the merged states of Seraikella and Kharsawan and including the Chota Nagpur Division, she has an area of 70,368 sq. miles with a population of 40,225,947 in 1951.

A more or less dry region, her rainfall averages about 48 inches in Bihar proper and 53 inches in Chota Nagpur which is a hilly and wooded tract and which mainly accounts for her having about 15% of her total area under forests. Agriculture is the basic occupation of the people, Bihar having the second largest area of the Union under rice, sugarcane, barley and maize, the third in linseed, rape and cotton, sesamum, castor-seed and tea are also grown in small quantities. Bihar however, accounts for 60%

of the lac produced in India. The Chota Nagpur Division which produces most of it, is also the richest in India in mineral resources. Coal, iron, mica, manganese, chromite, lead, nickel, copper, saltpetre and asbestos are already mined in the State, other resources being as yet unprospected. Bihar has one of the largest cigarette factories in the world at Monghyr and Tata Iron & Steel Works at Jamshedpur is one of the largest in the world . Bihar already accounts for 78% of the pig iron and 87% of the steel ingot production of India and stand second in sugar. Besides the Ganges and other rivers which are a good system of communication in the interior, the State has a considerable mileage of railway besides 1,152 miles of national highways, 4,700 miles of surfaced roads and about 28,000 miles of unsurfaced roads.

Following are the districts of Bihar—Patna, Gaya, Sahabad, Saran, Champaran, Muzaffarpur, Darbhanga, Bhagalpur, Monghyr, Purnea, Santhal Parganas, Hazaribagh, Ranchi, Palamou, Manbhum and Singhbhum.

Governor—HIS EXCELLENCY SRI MADHO SRIHARI ANEY

BOMBAY

Bombay, stretching along the western coast of peninsular India, has an area of 111,433·8 sq. miles with the 176 odd states merged with it in 1948 and 1949, and a total population of 35,955,143 in 1951. Bounded on the west by the Arabian Sea, Saurashtra and Kutch, she has Rajasthan on her north, Madhya Bharat, Madhya Pradesh and Hyderabad on the east and Mysore and Madras to the south.

A wide diversity exists in the soil and climate of the State from the north to the south, average rainfall in the north being above 30 inches, with about 30 inches, in the south and above 100 inches in the middle. Agriculture, the occupation of the majority of the people, naturally varies. On the whole, Bombay has the longest area of the Union under jowar and bajra, second in cotton and tobacco, third in groundnut and produces considerable quantities of rice, wheat and ragi and small quantities of maize, barley, gram, sugarcane, and oil-seeds. The forest tracts of the State which constitute about 16% of the area move along with the Western Ghats, Satpura Hills and the Vindhya ranges. While bauxite, manganese and glass-sand are the only minerals that are being worked in sufficient quantities, other resources are also known to exist and await prospecting.

Industry and commerce flourish greatly in this maritime state, the number of registered factories here being the largest in the Union. In cotton textile industry for example, Bombay is responsible for more than 50% of the production of the country. Bombay is the leading cotton textile centre not only of India but of the world. Out of 416 textile mills in India, 209 mills are located here. On another side, the State handles about 52% of the value of the import trade of India and about 18% of the export trade. In addition, she enjoys a large volume of coastal trade. Except in the south the communications of the State are good with about 3000 miles of railways and about 13,000 miles of surfaced roads.

Bombay has following districts—Ahmedabad, Broach and Panch Mahals, Kaira, Surat, Thana, Bombay Suburban, Ahmednagar, East Khandesh, West Khandesh, Nasik, Poona, Satara, Sholapur, Belgaun, Bijapur, Dharwar, Kanara, Kolaba, Ratnagiri.

Governor—HIS EXCELLENCY RAJA SIR MAHARAJ SINGH

MADHYA PRADESH

Madhya Pradesh, the biggest State in India in size, is situated in the heart of India with an area of 130,323 sq. miles and a population 21,327,898 in 1951 and is surrounded on the north by Madhya-Bharat, Vindhya Pradesh, the Uttar Pradesh and Bihar on the south-east by Orissa and on the south-west by Hyderabad and Bombay. Fifteen states have merged with her in 1947.

The State is rich in mineral resources and agricultural and forest wealth. Widespread coal deposits constitute one of the State's principal mineral resources and are located mainly in the Pench-Kanhan Valley about 100 miles to the north of Nagpur. Nature has also endowed the State with or other basic and key materials such as iron, manganese, bauxite and lime stone.

Madhya Pradesh's river systems: Narmada, Tapti, Wardha, Wainganga and Indravati lend themselves admirably to multi-purpose development schemes, yielding large blocks of power and capable of bringing vast tracts under irrigation.

Placed in an arid region, the rainfall averages on the west about 46 inches, on the south-west just about 30 inches and on the east about 50 inches. Among the States in the Union, she stands fourth in rice, wheat and sesamum, while growing among other things sugarcane, bajra, ragi, maize, tobacco, groundnut and other oil-seeds. Her forest tracts, with an area a little less than 20% of the total, are rich in timber and other forest produce including lac.

One fifth of the population of Madhya Bharat consists of aboriginals. They spread over different points of the State—south of the Vindya Plateau, Districts of Chhindwara, Mandla and the uplands of Balaghat and also in the plain districts of Nagpur, Berar and Chhatisgarh. They are diverse tribes—the Ghonds (being the most numerous), the Korwas, the Parjas, the Marias, the Baigas, etc. Different dialects and varied habits are noticeable in the lives and customs of these people, but all of them are a set of unsophisticated lot, mostly living in agriculture, while some, like Korwas of Sanna hunt for their food. In the midst of grandeur of the hills and forests the tribes have developed great taste for colour, music and dance.

Hindi prevails in the north and the east, Marathi in Berar and West and Centre of the State. Hindi is spoken by 56 p.c. and is the *lingua franca* of the State, Marathi by 31 p.c. and Gondi by 7 p.c.

Districts—Nagpur, Wardha, Chanda, Chhindwara, Betul, Jabalpur, Saugor, Mandla, Hoshangabad, Nimar, Raipur, Bilaspur, Drug, Bhandara, Balaghat, Amraoti, Yeotmal, Akola, Buldana.

Governor—HIS EXCELLENCY

SRI MANGALDAS MANCHRAM PAKVASA

MADRAS

The State of Madras is the southernmost State of the Indian Union. Extending from Cape Comorin in the south to Ganjam district of Orissa State in the north-east and North Canara of the Bombay State in the north-west, the Madras lies between the Bay of Bengal and the Arabian Sea and covers almost the whole of South India. Including three States (Pudukottai, Sandur and Baganapalle) merged in it, the area of the Madras State is 127,409·38. The population according to 1951 census is 5,69,52,331.

Along the whole length of the western coast run the Western Ghats averaging 4,000 and rising to 8,000 ft. The only break is the Palghat Gap in Malabar, 16 miles wide. Down the Eastern coast sweeps the chain of Eastern Ghats usually about 2,000 ft. in height; on their way southwards these ranges eventually meet and at a point of junction *i.e.*, a striking upheaval known as the Nilgiri hills.

We have five natural divisions in the Madras State, namely, the strip facing the Arabian Sea, which may be called the West Coast; the central tableland, usually known as the Deccan; the East Coast division proper running as far south as Nellore district and the South division comprising the majore State.

The three great rivers of the State are the *Godavari, Kristna* and *Cauvery* and the less important rivers are *Pennar, Ponnaiyar* and *Thambraparni.*

The population of the State speaks mainly four languages and may be divided on the linguistic basis as follows: *Tamil* 40 p.c, *Telugu* 38 p.c.; *Malayalam* 8 p.c., *Canarese* 8 p.c. and others 10 p.c.

16·9 p.c. of the total area of the State is covered by forests. The principal commercial crops of the State are, groundnut, cotton, sugarcane, gingelly, cocoanut, tapioca and castor arranged in a descending order of importance with reference to area. The staple food crops of the State are paddy, millets, pulses, onions, potatoes, sweet potatoes, tapioca and plantains.

The chief mineral productions of the State are mica, limestone, berytes, china clay, gypsum, magnesite and bauxite which make a good contribution to India's mineral exports.

The most important industries of the State are textiles, engineering, sugar, tobacco, matches oil milling, bricks and tiles, cement, lime, potteries, tanning, ginning and pressing. South India is noted for tanning industry. The State exports to the foreign markets hides and skins valued at more than 11 crores of rupees per annum. Other industries, both perennial and seasonal include hosiery, silk mills, woollen mills, founderies, iron and steel mills, tea and coffee breweries, rice mills, bones and manures, chemicals oil mills, paints, soaps, paper mills, printing, bricks and tiles, glass, saw mills, rope works.

Power Projects—(*i*) Muchukund Hydro-electric Scheme, (*ii*) Pykara Electric Scheme, (*iii*) Moyar Hydro-electric Scheme, (*iv*) Madras Thermal Scheme, (*v*) Nellore Thermal Scheme, (*vi*) Papanasam Electric System, (*vii*) Mettur Hydro-electric Scheme, (*viii*) Tungabhadra Electric System, (*ix*) Vijayawada Thermal Scheme, (*x*) Visakhapatnam Thermal Scheme.

Irrigation Projects—(*i*) Mettur Project, (*ii*) Lower Bhavnani Project, (*iii*) Malampuzha Project, (*iv*) Karihirapuzha Project, (*v*) Perur Reservoir, (*vi*) Rollapad Scheme, (*vii*) Krishna Delta Drainage, (*ix*) Bhairavanitippa Project, (*x*) Manimuthar Project, (*xi*) Araniar Project, (*xii*) Walayar Project, (*xiii*) Mangalam Project, (*xiv*) Coringa Island Project.

Four Major Irrigation Schemes—(*i*) Tungabhadra Project, (*ii*) Lower Bhavnani Project, (*iii*) Krishna Pennar Project, (*iv*) Ramapadasagar Project.

Main Industries—(1) Textiles, (2) Sericulture, (3) Sugar, (4) Oil milling, (5) Vanaspati, (6) Soap, (7) Tiles, (8) Matches, (9) Cement, (10) Chemicals and Fertilisers, (11) Glass, (12) Film Industry.

Main Cottage Industries—(1) Handloom Weaving, (2) Brass wares, (3) Palmyra Jaggery Products, (4) Coir goods, (5) Pottery, (6) Mats, (7) Umbrella, (8) Khadi, (9) Stone utensils, (10) Matches, (11) Alluminium wares, (12) Lace works, (13) Glass Bangles, (14) Wood carving, (15) Slates, (16) Ivory works, (17) Leather goods and leather tanning.

The names of the Madras districts are—Visakapatnam, East Godavari, West Godavari, Kistna, Guntur, Nellore, Chittoor, Cuddapah, Kurnool, Bellary, Anantapur, Madras, South Arcot, North Arcot, Chingleput, Tanjore, Tiruchirapalli, Mathurai, Ramnad, Tirunelveli, Salem, Coimbatore, Malabar, South Kanara and Nilgiris.

Governor—

HIS EXCELLENCY THE MAHARAJA OF BHAVNAGAR, K.C.S.I.

ORISSA

Orissa State on the east coast of India placed between Madras and Bengal to her south-west and north-east, is bounded by Bihar and Madhya Pradesh on the north and west and faces the Bay of Bengal on the south. Reconstructed as a distinct unit in 1936 and with the 24 eastern states merging into her in 1948 and 1949, she has an area of 59,869 sq. miles with a population of 14,644,293 according to 1951 census.

The Province consists of following districts with their headquarters in brackets—

Cuttack (Cuttack), Puri (Puri), Balasore (Balasore), Sambalpur (Sambalpur), Ganjam (Chatrapur), Koraput (Koraput), Dhenkanal (Dhenkanal), Sundergarh (Sundergarh), Mayurbhanj (Baripada), Koenjhar (Keonjhargarh), Kalahandi (Bhawanipatan), Bolangir-Patna (Bolangir), Boud-Phulbani (Phulbani).

The following 24 Indian States have merged with Orissa—Kenojhar, Gangpur, Bonai, Bamra, Pal-Lahara, Dhenkanal, Talchar, Hindol, Rairakhol, Sonepur, Athmallik, Patna, Kalahandi, Borud, Daspalla, Nayagarh, Khondpara, Ranpur, Baramaba, Tigiria, Athgarh, Narsinghpur, Nilgiri and Mayurbhanj.

An area of non-extreme climate, she enjoys about 57 inches of rainfall normally on the average and agriculture, the principal occupation here, depends wholly upon it except in the Mahanadi delta. Rice is the principal crop here although, jute, ragi, sugarcane, tumeric, oilseeds, jowar and maize in considerable quantities and pulses, coffee, tobacco and cotton are also grown. Fishing, particularly in the Chilka lake, and silk growing are important occupations. Her large tracts of forests, which occupy 12,965 sq. miles particularly in the north and the west, from an important source of income. Of her mineral resources, considerable quantities of high grade iron ore, as well as large quantities of coal, manganese, mica and lime-stone have already been located and are worked with the result that she supplies at present 60% of the iron ore consumed in India. Indeed her north and north-west areas are one of the richest areas of the mineral resources in India. Iron ore is mostly found in Keonjhar, Mayurbhanj and Bonai. Talchar has the largest coal fields in Orissa. Awaiting the harnessing of the Mahanadi, she is as yet backward in industry, producing in the main only paper, and sugar in small quantities. Handloom industry is by far the most universal industry in Orissa. The brass and bell-metal industry has also reached high order. The silver filgree work is also very famous in Cuttack. The other industries are *endi* and *tassur* fabrics, cutlery and horn articles. Mainly rural, her communications are proverbially backward, with 12,742 miles of roads and 783 miles of railways.

Orissa has now a hydro-electric scheme popularly known a *Duduma Project* and the *Hirakud Multi-purpose Project.* The Duduma Project is located in the Machkund river which for a part of its length forms the boundary between Orissa and Madras. There is a high waterfall at Duduma which is helping for the developing of the scheme. The installation is expected to be 100,000 k.w. The Government of Madras are proceeding with the scheme on behalf of both the governments. The Hirakud Scheme is being constructed by the Central Water Power, Irrigation and Navigation Commission of the Government of India on behalf of Orissa. This scheme consists of a dam across the Mahanadi, some 15,700 ft. long. The total installed capacity is expected to be 350,000 k.w., of which 123,000 k.w. will be installed, the rest being installed as load develops. The scheme will also irrigate nearly a million acres of land.

Bhubaneswar is now the new capital of Orissa. The foundation stone was laid by the Prime Minister of India on 13th April, 1948.

Place of importance in Orissa are—Puri, Sakhigopal, Bhubaneswar, Kandagiri, Udaygiri, Dhouli Hills, Konark, Sisupalgarh, Chilka Lake, Barabati Fort, Naraj, Biraja Temple (Jaipur), Atri Hotspring, Barunai Hill and Temple, Kathjuri Embankment, Kadam Rasul (Cuttack).

Governor—His Excellency Janab M. Asaf Ali

PUNJAB

The Punjab, one of the new north-west territories of India, is bound on the west by Pakistan, and Rajasthan, lying on the south and South-west on the north by Kashmir, a block of the Himachal Pradesh and Tibet, and on the east by Himachal Pradesh and Tibet, and on the east by Himachal Pradesh and Uttar Pradesh. Including three tiny states merged into her in 1948, she has a total area of 37,377·9 sq. miles with a population of 12,637,965 according to 1951 census.

Punjab now includes Jullundar and Ambala Divisions and Amritsar District of Lahore Division and part of Gurdaspur and Lahore Districts. Altogether it contains 13 districts as compared 29 in the old undivided Punjab. The two main languages of the State are Punjabi and Western Hindi. In hosiery industry, Punjab occupies a premier position in the whole of India. Blankets, rugs, cycle parts, utensil making, tanning and wood industries are the principal cottage industries.

An arid territory with extreme climate, her rainfall averages annually about 23 inches only. Irrigated by the Beas, the Sutlej and the Chenab rivers in the north and supplemented by canals, she has the second largest wheat and gram area in the Union, third in barley and maize, fourth in bajra and sugarcane, while producing considerable quantities of jowar, cotton, rice, rape and mustard and small quantities of tea, tobacco, groundnut and linseed among other things. She is particularly devoid of forests, the total area under forests coming to about 3·3% only. Of mineral resources too, anything except slate and bauxite has yet to be discovered.

Wool rearing and handloom weaving, the latter particularly, are important occupations. On the other hand while she possesses about 66% of the woollen textile factories and produces some quantity of paper, cotton, textiles, starch and chemicals and has some metal works, she is as yet backward in industry.

The major irrigation and power projects—(1) Uhal River Hydro-Electric Project, (2) Bhakra-Nangal Irrigation-cum-Power Project.

Main Industries—(1) Handloom weaving and spinning, (2) Hosiery, (3) Metal works, (4) Pottery.

The New Capital of the Punjab is being built at Chandigarh and a team of foreign experts is evolving architectural designs best suited to Indian traditions.

Districts—Ambala, Amritsar, Ferozepur, Gurgaon, Gurdaspur, Hissar, Hoshiarpur, Jullundar, Kangra, Karnal, Ludhiana, Rhotak, Simla.

UTTAR PRADESH

Uttar Pradesh, another frontier State along the foothills of the Himalayas, has common borders with Tibet and Nepal in the north, and is bound by Bihar in the east, Himachal Pradesh, Punjab, Rajasthan and Madhya Bharat in the west and Vindhya Pradesh and Madhya Pradesh in the south. Including Tehri-Garhwal, Rampur and Banaras states merged into her in 1949, she has a total area of 112,523 sq. miles with a population of 6,32,80,255 according to 1951 census.

With a dry and extreme climate, her rainfall averages below 40 inches. The deficiency is however, is partly made up by the Ganges, the Jamuna and their canals making the basic occupation agriculture more or less profitable. Uttar Pradesh in one of the best watered States of India. The climate on the whole is cooler and drier than that of West Bengal, though in hot weather, the part in fiercer in the plains. U.P. is only just within monsoon region and rainfall consequently is not so heavy as it is in further east. Compared to the other States in the Union, she thus stands first in her area under wheat, maize, barley, gram sugarcane and sesamum, second in bajra, linseed and rape and mustard besides producing considerable amounts of rice, jawar and small quantities of ragi, cotton, groundnut, tea and tobacco. She is besides the only opium producing area in the Union. Her forest areas as yet amount to about 13% of the total and is situated mainly at the foot of the Himalayas. Her mineral resources too have not been known to be very considerable; deposits of copper, slate, glass-sand, sandstone and steatite being alone located. This is indeed one of the few industrially advanced territories with some modern and large-scale and many old cottage industries, weaving, glass and metal-wares being the chief in the last category. She is particularly noted however, for producing about 60% of the total sugar of India and a large amount of leather and footwear, cotton and woollen textiles, paper and chemicals among other things. She has also one of the best communication systems in the country, so far as it goes, since very ancient times, with the longest railway mileage of all the units of the Union at present. Cottage and artistic industries abound in U.P. Embroidery work is done in Lucknow; in Banaras gold and silverwork is done on silk, velvet, crepe and georgette.

In glass industry of U.P. stands first in India. Firozabad is the chief centre of manufacturing glass bangles in India. Moradabad is noted for its lacquered brass work, Agra for its durries and marble and alabaster articles.

Districts—Dehra Dun, Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Aligarh, Mathura, Agra. Manipuri, Etah, Bareilly, Bijnor, Budaun, Moradabad, Rampur, Shahjanpur, Pilibhit, Furrukhabad. Etawah, Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur, Banda, Banaras, Mirzapur, Jaunpur, Ghazipur, Ballia, Gorakpur, Basti, Azamgarh, Deoria, Naintal. Almora, Garhwal, Lucknow, Unao, Rae Bareli, Sitapur, Hardoi, Kheri, Fyzabad, Gonda, Baraich, Sultanpur, Partabgarh, Barabanki.

Governor—HIS EXCELLENCY SIR HOMI P. MODY

MADHYA BHARAT

Madhyabharat, containing within it 20 Central Indian States including the premier states of Gawlior and Indore, the remnants of the Marhatta Empire, is bounded by Rajasthan and Bombay in the north-west and west, the U.P. and M.P. in the north-east and east. With an area of 46,477·9 sq. miles and a population of 7,954,154 according to 1951 census, this State is in a comparatively dry region with a normal average rainfall of about 34 inches. The principal crops of the territory are wheat. jowar, gram, pulses, maize and cotton, rice, bajra, barley, sugarcane and oilseeds being also grown. Little or no survey of minerals, being made so far, the only resources that have come to notice are building stones and manganese.

Due to Gwalior and Indore, this State is very advanced in certain industries including among them cotton textiles, leather, and ceramics. These two units also contribute much of their communication facilities including railways and motorable roads. Linguistically, culturally, the region forms a compact block. The State was inaugurated on 28th May, 1948.

The following States constitute the State of Madhya Bharat—Alirajpur, Barwani, Dewas (Senior), Dewas (Junior), Dhar, Gwalior, Indore, Jaora, Jhabua, Khilchipur, Narsingara, Rajgarh, Ratlam, Sailana, Sitamanu, Jobat, Kathiwara, Kurwai, Mathwar and Piploda.

Some distinctive features of this union are—

(*a*) For the purpose of the election of the Rajpramukh every ruler will have such number of votes as is equal to the number of lakhs in the population of his state.

(*b*) The present rulers of Gwalior and Indore will be the first Rajpramukh respectvely during their lifetime.

(*c*) Senior Uprajpramukh will also receive an appropriate allowance.

(*d*) The privy purse of the rulers of Gwalior and Indore has been fixed for the lifetime of the present rulers at a figure higher than the miximum fixed in other cases.

Main cottage industries are—gold lace work of Chanderi and Maheshwar, wooden toys of Sheopur, blanket weaving at Mandswar and Manasa.

Places worth seeing are—Fort of Gwalior and Mandu (Dhar), caves at Bagh and Udyagiri, Mahankaleshwar Temple at Ujjain, Lake district of Shivapuri etc.

Rajpramukh—LT.-GENERAL H. H. THE MAHARAJA SIR JIWAJI RAO, SCINDIA, G.C.I.E., G.C.S.I. MAHARAJA OF GWALIOR

Senior Rajpramukh—MAJ.-GENL. H. H. THE MAHARAJA OF INDORE.

Junior Upra-Rajpramukhs—H. H. THE MAHARAJA OF DHAR AND RAJA RAO BAHADUR YESHODHAR SINGH OF KHILCHIPUR.

RAJASTHAN

The integration of Rajputana States were completed in three stages. The Rajasthan Union was originally formed by the smaller Rajputana States in the South-east, namely Banswara (including Kushalgarh), Bundi, Dungarpur, Jhalawar, Kishengarh, Kotah, Partabgarh, Shahpura and Tonk. These nine States were united together to form United States of Rajasthan and was inaugurated on 25th March 1948. Subsequently the Ruler of Mewar expressed willingness to join Rajasthan Union. So Second Rajasthan Union with Mewar was inaugurated on 18th April, 1948. Further negotiation was initiated for the formation of a greater Rajasthan Union. As a result of these negotiations, a fresh covenant was signed providing for the integration of three major states of Rajputana *i.e.*, Jaipur, Jodhpur and Bikaner and the State of Jaisalmer with the former Rajasthan Union to form the United State of Rajasthan. The state was inaugurated on March 30th, 1949.

After this, the question of the integration of Matsya Union which was inaugurated on 18th March 1948 consisting of the States of Alwar, Bharatpur, Dholpur and Karauli was taken up. An agreement was signed on 10th May, 1949 providing for the taking over by Rajasthan government of the administration of the Matsya Union with the effect of May 15th, 1949.

Rajasthan is the biggest of the union of Indian states merged to form a State with 128,424 sq. miles of territory and a population of 15,297,979 according to 1951 census. Surrounded by Pakistan in the west and north-west, this State has Punjab, the U.P. and Madhya Bharat in her east and north-east Bombay, Saurashtra and Kutch to her south-west. Intersected almost from end to by the Aravalli hills, the tract on the north-west of the hills is a sandy and ill-watered area with an average rainfall of about 13 inches while the tract to its south-west is comparatively fertile and has an average rainfall of 26 inches. The discovery of subsoil water in the Luni river in the near-desert zone promises to change the face of the earth in that region. Jowar, bajra, wheat, maize, barley, gram are the principal crops, certain amounts of cotton, sesamum, groundnut and rice being also grown. Among the known mineral resources of the State are, coal, copper, copper sulphate, mica, gypsum, wolfram, zinc blend, marble, steatite, garnet and salt. Weaving, metal work, marble work and embroidery are the main cottage industries, a beginning in modern large scale industries like cotton textiles being only recently made. This big etate has a total of about 3,000 miles of railway, only about 2,000 miles being owned by the two big units of Bikaner and Jodhpur, the rest being parts of the Indian railway.

Maharaj Pramukh—H. H. THE MAHARAJA OF UDAIPUR
Rajpramukh—H. H. the Maharaja of Jaipur.
Upa-Rajpramukh—H. H. the Maharaja of Kotah.

SAURASHTRA

Saurashtra has the unique position of being a union of as may as 221 States and Estates with varying territories and jurisdictions. Many of these States had several scattered islands of territories and added together these States divided the map of Kathiawar into about 860 different areas. The total area is only 21,451 sq. miles with a population of 41,37,359 according to 1951 census.

The State is surrounded almost on three sides by the Arabian Sea and the Gulf of Cambay, except the narrow territory between Kutch and Bombay going as far as touch Rajasthan. The climate is rather dry, the average rainfall being about 30 inches. Agriculture which is the principal industry, as elsewhere, produces principally jowar, bajra, wheat, cotton, and oil-seeds including groundnut, rice and sugarcane being produced in small quantities. The State has valuable teak and other forest tracts in most areas. There is a small pearl fishery off the cost of Nawanagar. The state is known to contain magnesium chloride, building and other stones, steatite, and a little of gold. Besides weaving and metal work as cottage industries, the State has the following principal industries—cotton textiles, cement, ceramics, glass, match, oils, vegetable, silk and artificial silk, soap, sugar. Although communications of the State are comparatively good with railways and motorable roads a large trade is carried on by the sea.

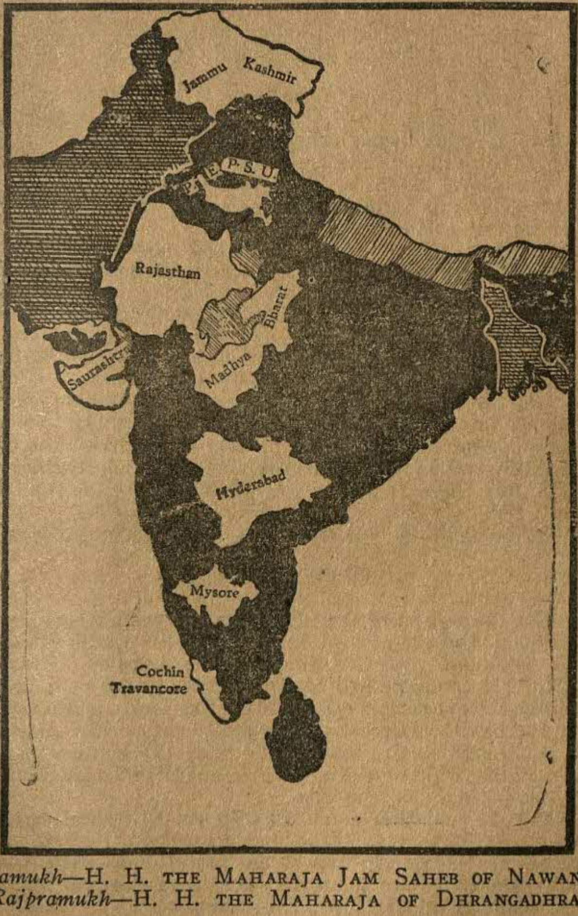
Some of the distinctive features of the Saurashtra Union are as follows—

(*a*) There is a presidium consisting of the rulers of Nawanagar and Bhavnagar as permanent members and three other rulers elected from among the members of the Council of Rulers. Rajpramukh and Up-Rajpramukh will be elected from amongst the members of the Presidium.

(*b*) A Joint Advisory Council of Ministers of Saurashtra and the Ministers of Bombay will be established for investigating and discussing subjects of common concern and making recommendations for the better co-ordination of policy and action with respect to such matters.

(*c*) There is a specific provisions that Saurashtra and other Gujerati-speaking areas may be united to form an union on such terms and conditions as may be agreed by the Council of Rulers as well as Council of Ministers.

Following are the districts with headquarters—Central Saurashtra (Rajkot), Halar (Jamnagar), Zalawad (Surendranagar), Gohilwad (Bhavnagar), and Sorath (Junagadh).



Rajpramukh—H. H. THE MAHARAJA JAM SAHEB OF NAWANAGAR.
Upa-Rajpramukh—H. H. THE MAHARAJA OF DHRANGADHRA.

PATIALA AND EAST PUNJAB STATES UNION

The Patiala and East Punjab States Union comprises Patiala, Kapurthala, Nabha, Jind, Faridkot, Malerkotla, Nalagarh and Khalsia States. The covenant for the formation of the Union was signed by the rulers concerned on May 5, 1948 and the Union was inaugurated on the 15th July,

1948. The States lay in three separate blocks. The main block compristd the territories of Patiala, Nabha, Jind, Malerkhotla and Faridkot States in the heart of East Punjab. The Kapurthala State consisted of three enclaves in the Jullundur division of the East Punjab. The outlying districts of Narnaul, Dadri and Bawal which formed parts of Patiala, Jind and Nabha States respectively lay within the geographical orbit of the southern districts of the East Punjab.

The chief source of income in the State is agriculture which produces among other things gram, wheat, jowar, bajra, maize, sugarcane, cotton and tea. On the other hand, none except Patiala owns any railways, although the Indian railway lines cross this State at various places. Communication otherwise is not bad. The people of the Union speak the same language—*Punjabi*. Jats form the major part of the population who are regarded a first rate soldiers and finest peasants.

Next to agriculture, industry is the second most important occupation of the people. There are about 450 large and small scale industries scattered all over the States. There are two big sugar factories in Kapurthala State of the Union and also two big cement factories. The important cottage industries of the State are—gota kinari, handloom and hosiery, calico printing, cycle parts, desi shoes, woolen blankets, basket-making, bangles, sewing machine parts.

The Pepsu Government is a shareholder in the *Bakhra Dam* and its allied irrigation projects to the extent of 22 p.c. in the capital outlay. About 7 lac acres of land would be brought under irrigation by Bhakra canals. The Government is also undertaking independently the following projects—(1) *Ben River Irrigation Project*, (2) *Narnaul Bund Irrigation Project* etc.

Rajpramukh—H. H. THE MAHARAJA OF PATIALA

HYDERABAD

Hyderabad, the biggest of the Indian States, covering an area of 82,313 sq. miles is more than the area of England and Scotland put together and the area exceeds the Province of Bengal before partition. It has a population of 1,86,65,253 according to 1951 census. It is placed at about the centre of the peninsular India surrounded by M.P., Bombay and Madras. Hyderabad is the heart of the Deccan. It is roughly shaped like a diamond plus a triangle in the south-west corner. The State lies between the Godavari and its big left-bank tributaries on the one side and the Kistna and its big right-bank tributary on the other.

Hyderabad has a moderate rainfall of about 30 inches, most of which falls in the summer monsoon. The numerous rivers naturally irrigate a large part of the State. The black soil in the north-west grows wheat and cotton, in the south-east the soil is sandy and rice and millets are the chief crops. Gold is mined in the Hutti area.

The States possess 9,455 sq. miles of forest.

As for the tourists, it contains Ajanta and Ellora caves which are famous for their frescoes all over the world. Other interesting things are Bhadrachallam temple of Ramdas fame, the Darga of Khaja Bande Nawaz at Gulbarga.

The State has 25,052,000 acres under cultivation which includes paddy, wheat, jawar, groundnut and cotton. It has 1,764,000 acres under irrigation and 15,478 major and 16,418 minor tanks. It has also a total area of 12,539·25 sq. miles of forests (*i.e.,* 15·16 per cent.

As regards minerals, the State produces mica and graphite, coal, gold and diamonds.

As regards industries, there are 765 large industrial establishments employing on an averagee 70,387 persons. The annual production of coal in the State is 10,45,383 tons. The State also produces sugar, paper, cement, power, alcohol, glass, cigarettes.

It has 1,563 miles of railway within the State. The N. S. Railway operates on an agency basis on behalf of Hyderabad Government.

Hyderabad has been recently divided into sixteen districts, such as, Hyderabad, Mahbubnagar, Raichur, Gulbarga, Bidar, Osmanabad, Bhir, Aurangabad, Parbhani, Nanded, Adilabad, Nizamabad, Medak, Karimnagar, Warangal and Nalgonda.

Rajpramukh—H. E. H. NIZAM OF HYDERABAD

JAMMU & KASHMIR

Jammu and Kashmir the northernmost State of India bordering on the USSR, Sinkiang and Tibet in the north and north-east and Pakistan on the west and South-west, has an area of 82,258 sq. miles. The altitude in the valley varies from 5,000 feet above the sea level. According to estimated population of 1950, the total population was 4·37 millions. Although acceding to India as early as October, 1947, the relationship of the State with India is governed by the special article 306-A of the Constitution of India which according to the declaration of the Government of India limits the operation of Indian laws to those agreed under the Instrument of Accession or the will of the State Constituent Assembly which has come into being. The country is almost entirely mountainous, and it may be geographically divided into three areas: Tibetan and semi-Tibetan tracts in the north, containing the districts of Ladak and Gilgit; the middle region of the Happy Valley of Kashmir and the large level areas of Jammu in the south. This mountainous State covered on its north by snow for about half the year and with extensive rich forests in the valleys of the Chenab, the Jhelum and the Indus, has its chief crops in rice, wheat, maize, barley, oil, seeds, cotton, tobacco and saffron. The State has also a large amount of fruits for export, principally walnuts, almonds, pears and apples. The mineral resources of the State as yet unexploited are large indeed including among them coal, zinc, copper, lead, bauxite fuller's earth, slate, kaolin, asbestos, as well as gold and sapphiers. Her silk filature industry is the biggest in the world and equally famed are her shawls, carpets and wooden carvings.

The chief industries of the State are—silk, woollens, wood-carving papier mache, carpet weaving, namda industry and gabba industry.

Most significant reform of Kashmir has been the abolition of landlordism by passing of the *Big Landed Estates Abolition Act* with the result that lands have now passed to the tillers of the soil.

The land route begins from Pathankot, the railway terminus of East Punjab railway. The distance from Pathankot to Srinagar *via* Jammu is 267 miles. The first 64 miles upto Jammu are by a nicely metalled and tarred plain road and the rest leads through mountainous and picturesque scenery. The Indian National Airways Ltd. are operating passenger service between Delhi and Srinagar.

Kashmir is divided into three provinces—Jammu Province, Kashmir Province and Frontier Provinces (including Ladak).

Ruler—KARAN SINGH BAHADUR, Yuvaraj of Kashmr

Prime Minister—SHEIKH MUHAMMAD ABDULLAH.

MYSORE STATE

Mysore State is surrounded on all sides by the Madras State except on the north and the north-west where it is boundd by the districts of Dharwar and North Canara, respectively, and towards the south-west by Coorg. The capital of the State is Mysore which is also the residence of the Maharaja, and the headquarters of the Mysore University. The administrative headquarters are Bangalore.

The area of the State is 29,458 square miles, the population; 9,071,678 according to 1951 census. For administrative purposes the State is divided into nine districts: namely, Bangalore, Mandya, Mysore, Hassan, Chickmagalur, Shimoga, Chitaldrug, Tumkur and Kolar.

Mysore has acceded to the Republic of India under certain specified subjects and has sent its own representatives to the Indian Parliament.

The chief agricultural products are rice, ragi, sugarcane, coffee, cocoanut, areca, cotton and mulberry.

Industries manufacturing iron and steel, cement, paper, sugar, cotton and silk, soaps, chemicals and fertilisers, sandalwood oil, etc. thrive in the State. The only aircraft factory in India is situated at Bangalore. Mysore is the principal gold producing centre in India. Plans for starting a fertiliser factory at Bhadravati and a raw films factory near Mysore are well on the road to accomplishment and recently Government have sanctioned the expansion of the Government Electric Factory and the revival of the Drugget industry. Government has also ordered working out of details for the establishment of a rayon factory in the State. Other schemes under implementation are the setting up of a production-cum-training centre for the manufacture of glass bangles, the establishment of a coir industry centre, the manufacture of writing chalk on a cottage industry basis and the organisation of the oil ghana industry along the lines adopted at the oil ghana centre at Wardha.

Communications by road as well as by railway are well maintained throughout the State. There are 6,273 miles of road of which 5,651 miles are metalled. The State railway comprises 609 miles metre gauge line and 102 miles narrow gauge line. Bangalore is also rapidly developing into an important air port.

The State is devoting special attention to post-war planning for which many schemes have been formulated. So far, Government have sanctioned 80 schemes relating to agriculture, veterinary and animal husbandry, electrical, railways and medical and public health.

Administration—The administration is carried on by the Maharaja as Raj Pramukh, and a Council of Ministers which functions on the basis of joint responsibility. The Council consists of a Chief Minister and six other Ministers. The Constituent Assembly which are set up in the year 1948 to frame the new Constitution, composed of 76 elected members of whom five were Muslims and nine Depressed Classes, has been converted into the Legislative Assembly.

Rajpramukh—H. H. THE MAHARAJA OF MYSORE

TRAVANCORE-COCHIN

Travancore-Cochin or Kerala Union, a union of the two southern-most States lying on the south-west coast of the Indian peninsula with a total territory of 9143·9 sq. miles and a population of 9,280,425 according to 1951 census, stretches down along the west coast bounded by Madras on the one side and the Arabian sea on the other with the Cape Comorin as the apex.

Rice is the principal foodgrain grown in the State, the main sources of the agricultural wealth being cocoanut, coffee, tea, spices, rubber and jute. The State has also a great wealth of forests containing teak, blackwood, ebony and sandalwood. Among the mineral resources of the State are 90 miles of coastline with ilmenite, zircon and thorium bearing monazite deposits, besides abundant supplies of graphite, mica and kaolin of exceptional quality. The presence of the monazite sands specially is of considerable importance in the production of atomic energy in India. Besides the cottage industries of handloom weaving, ivory and wood-carving, embroidery and lace work, palm juice jaggery manufacture, extraction of oil from copra, manufacture of coir yarn and mats, rubber goods, ceramic and glassware, paper, chemicals, fertilisers and aluminium are the most important industries here. Well provided with roads and a small mileage of railways besides navigable rivers and canal systems and natural backwaters and helped with highly developed co-operative and joinstock banking systems, the State is very advanced in commerce and trade.

One of the special features of the Union of two States is the arrangement in respect of Devaswoms—Hindu temples—and the property attached to them in the two States including the temple of Shri Padmanabhaswami, the tutelary diety of the ruling family of Travancore. In Travancore alone, apart from this important shrine, there are 348 major Devaswoms and 1123 minor Devaswoms. The covenant now provides for a fixed contribution of Rs. 5·1 millions for the maintenance of Devaswoms in Travancore, out of which a sum of Rs. 600,000 to be contributed towards the maintenance of Shri Padmanabhaswami Temple.

The overwhelming majority of the people of the two States are of the same stock, speak the same language and have a common culture and tradition. The union was inaugurated on July 1, 1949.

The State is divided into four districts—Trivandrum, Quilon, Kottayan and Trichur.

Rajpramuukh—H. H. THE MAHARAJA OF TRAVANCORE.

DELHI

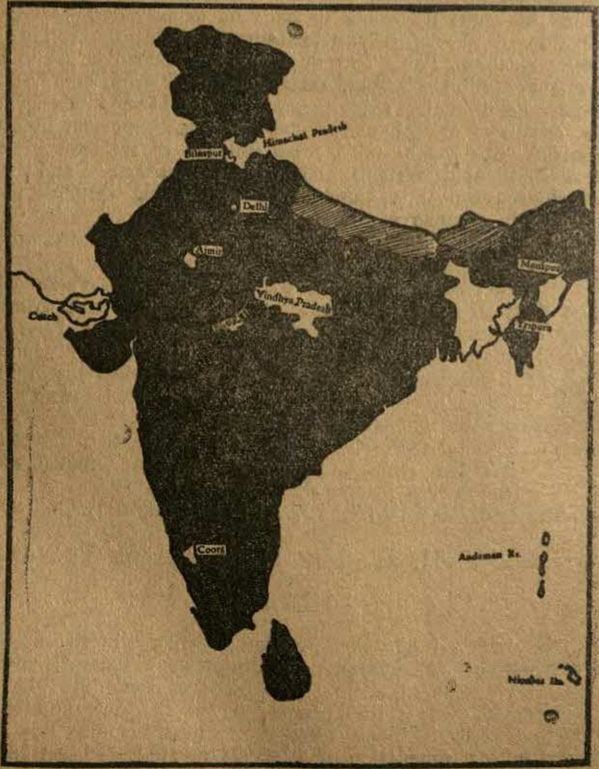
Delhi, the imperial city under many a dynasty in the past centuries, with its surrounding districts was constituted as a separate administrative unit for the seat of the Central Government of India in 1912. The seat of the Government was shifted since then to the new and modern city of New Delhi nearby. This smallest State of the Union has an area of 574 sq. miles with a population of 1,743,992 in 1951. Placed 700 ft. above sea level and the focal point of six railways, she has an arid territory and an extreme climate. An enclave of territory in Punjab bordering on the U.P., her average rainfall is about 26 inches. For her small area, she produces a considerable amount of gram, wheat, bajra, jowar, barley and some amount of sugarcane, rape and mustard and tobacco. Besides cottage industries like jewellery, brass and copperwares, ivory work, pottery, weaving, gold and silver embroidery, famed of yore, in recent times modern factories have been set up for the production of cotton textiles, and chemicals among other things.

Under the Part C States Act of 1951, the State has been provided with a Legislative Assembly.

Chief Commissioner—SHRI SHANKAR PRASAD, I.C.S.

AJMER

Ajmer is a territory placed about the centre of Rajasthan, and with an area of 2,425 sq. miles and a population of 6,92,506 according to 1951



census. Only a little less dry than the area to the west of her and covered with hills, the State is comparatively unsuitable for cultivation, yet producing jowar, bajra, wheat, barley, cotton and gram. Mica and marble are its main mineral resources and cotton textile the main factory industry. Communications are good with about 30 miles of railway, 68 miles of national highway road. The metre gauge line and B.B.C.I. Railway passes through the State.

Ajmer has been provided with a Legislative Assembly and Council of Ministers under the Part C States Act of 1951.

The Loco and Carriage workshops are the largest industrial works of the Western Railway in Ajmer.

The main cottage industries are handloom, weaving and spinning and gota (golden and silver lace) factories.

Chief Commissioner—A. D. PANDIT, I.C.S.

COORG

Coorg, an enclave of 1,593 sq. miles of territory in south-west Mysore bordering on Madras, had a population of 229,255 in 1951. With about 35 inches of average rainfall and about 33% of her territory covered by rich forest, she produces principally coffee, rice, ragi, spices and tea. Approachable by railway, she has also 324 miles of surfaced and 61 miles of unsurfaced roads.

Coorg is essentially an agricultural state and chief crops here are rice, ragi, coffee, orange, cardamom, pepper and plantains. Tea and rubber are also grown in some parts of the State. Citrus and plantains are the two more important fruits in Coorg.

The State has got Legislative Council and a Council of Ministers under Part C States Act of 1951.

Chief Commissioner—LT.-COL. KANWAR DAYA SINGH BEDI

BHOPAL

Bhopal, erstwhile a principal state of Central India and enclosed now between Madhya Bharat and Madhya Pradesh, has an area of 6,921 sq. miles with a population of 838,107 in 1951. Placed in a comparatively dry region with about 35 inches of annual rainfall, her arable land, good soil in the main, produces wheat, jowar, gram and pulses, rice, sugarcane, cotton and tobacco. The State forests also are extensive and valuable. And the main industries of the state are cotton textiles, match, sugar, strawboard and chemicals. Bhopal is also rich in such mineral deposits as iron, and mica, bauxite.

The agreement for merger was signed by the Ruler on April 30, 1949 and the State was taken over by a Chief Commissioner on behalf of the Government of India on June 1, 1949.

The State contains many remains of archaelogical interest—principal of which is the world famous *Sanchi Topes* which date from the 2nd century B.C.

Part C States Act of 1951 provides Bhopal with a Legislative Assembly and a Council of Ministers.

Chief Commissioner—V. VISHWANATHAN, I.C.S.

BILASPUR

The Group of East Punjab Hill States included the State of Bilaspur which has an area of 452·7 sq. miles with a population of 12,60,99 according to 1951 census. In view of the strategical importance of this State and the location of Bhakra Dam, which is project of all-India importance, it was decided to take over the State as a separate centrally-administered unit. The State was taken over under central administration on 12th October, 1948.

Chief Commissioner—H. H. RAJA ANAND CHAND OF BILASPUR

HIMACHAL PRADESH

Himachal Pradesh, comprises the territories of 21 Eastern Punjab Hill States nestling in the foothills of the Himalayas between Kashmir in the West and Uttar Pradesh in the East. It has an area of 10,451·2 sq. miles with a population of 98,33,67 according to 1951 census. The biggest of the merging States was Mandi. It was inaugurated on 15th April, 1948. Heavily wooden and assured of high rainfall, the State has two blocks, one to the west of Punjab bounded by the U.P. on the west and at the foot of the Himalayas and the other to the north of Punjab and bounded by Jammu and Kashmir. Wheat, maize, barley, rice, ragi, gram and sugarcane and potato are its principal crops, tea of small quantities being also grown. This State's forests contain the largest quantities of coniferous timber in northern India and they are the main source of revenue in the State. Potato is the chief cash crop.

Its main crops are maize, rice and potato besides fruits from its famous orchards. Communication is still very difficult throughout the territory and industry except in the cottage scale is relatively unknown. The State is now divided into four administrative districts, Mansu, Sirmul, Mandi and Chamba.

Historically these States were founded by Rajput immigrants in the 14th and 15th centuries, who had sought these Himalayan retreats to preserve their cultural freedom. Their cultural tradition brought from Rajputana greatly contributed to the creation of Kangra School of Art which marked a special phase of Indian painting which flourished between 1750 to 1950.

Part C States Act of 1951, provides the State with a Legislative Assembly and a Council of Ministers.

The names of Indian States that compose Himalchal Pradesh are Chamba, Sirmur, Suket, Baghal, Baghat, Balson, Bushahar, Bhajji, Beja, Darkoti, Dhami, Jubbal, Keonthal, Kumarsain, Kunihar, Kuthar, Mahlog, Mangal, Sangri, Tharoach and Mandi.

Chief Commissioner—BHAGVAN SAHAY

KUTCH

Kutch with her north frontier with the Sind Province of Pakistan and bounded by the Arabian Sea in the west, Saurashtra in south and east and connected with Rajasthan in the north-east, has an area of 8,514 sq. miles and a population of 567,606 according to 1951 census. Some portion of the State is occupied by what is known as the Rann of Kutch which is covered by water during most part of the year. This State, spoken of by the ancient Greeks for her maritime trade facilitated by deep calm-water approaches, has a good arable soil which produces in the main wheat, bajra, jowar, barley and cotton. Excluding the salty marsh known as the Ranns of Cutch, near the frontier with Sind, State is rich in gypsum, clays, limestone, iron and lignite. Well-known for beautiful embroidery and silver work, the State also manufactures silk and cotton goods. Trade, as of yore, is still mainly carried by sea. In view of the geographical situation of the State and the potentialities of this area, the development of which will require a considerable amount of money as well as technical assistance, which neither the State by itself nor the State of Saurashtra with which it was possible to integrate the State could provide, it was decided that the best solution of the State would be to treat it as a centrallv administered unit. Agreement was accordingly signed by the Ruler on 4th May, 1948 and the administartion was taken over by a Chief Commissioner on behalf of the Government of India on 1st June, 1949.

The State is provided with a *Council of Advisers* under Part C States Act of 1951.

Chief Commissione—C. K. DESAI, I.C.S.

MANIPUR

Manipur, hilly state on the eastern borders of Assam and protruding into Burma is another border State which has great strategic importance. It is, for the most part, surrounded by tribal hills areas in Assam; on the east it is bounded by the tribal territories of Burma. The security arrangements of this area require the special attention of the Government of India and it was therefore decided to take it over for central administration. Forests of various kinds cover the great part of her mountain ranges; the chief staple crop of this strategic State is rice; tea also is being produced in small quantities, other vegetable productions are fruits and cotton. Handloom industry is the principal industry of the State. The administration was taken over by a Chief Commissioner on 15th October, 1949.

Under *Part C States Act of 1951*, the State is provided with a Council of Advisers.

Chief Commissioner—E. P. MOON

TRIPURA

Tripura, an ancient hilly State lying to the south-west of Assam and protruding into East Pakistan, has an area of 4,049 sq. miles with a population of 639,029 according to 1951 census. Very rich in her forest resources as also mineral resources including petroleum, her agricultural produce includes, rice, jute, tea, sugarcane, cotton, oilseeds, etc. Besides handwoven cotton goods of unique designs, the State has at present very few industries. Her only means of communication now with the Union are by air and through a newly diverted road through Assam.

The State was taken over by a Chief Commissioner on behalf of the Government of India on 15th October, 1949.

The State is provided with a *Council of Advisers* under Part C States Act of 1951.

Chief Commissioner—CAPT. V. NANJAPPA.

VINDHYA PRADESH

Vindhya Pradesh was formed by union of 35 Baghelkhand and Bundelkhand States on April 2, 1948 with a total area of 24,600 sq. miles and a population of 3,577,431 according to 1951 census. It is situated between the U.P. and M.P. The fertile soil of the area assured of about 40 inches of rainfall annually, yields among other things rice, wheat, jowar, gram and pulses. The forest resources are also considerable.

Rewa, the biggest unit among these, also contains such valuable minerals as coal, manganese, bauxite, and limestone. Panna, another unit containing diamonds. Industries are of recent growth and have yet to be developed in this hilly tracts of territory with little of good communications. Vindhya Pradesh is situated right in the centre of the Indian Union and it is essental to set up a stable administration and to develop means of communication in this area.

The State was at first integrated as an Union of States with the Maharaja of Rewa as Rajpramukh and the Maharaja of Panna as Upa Rajpramukh. But due to the chronic jealously between the two groups of States, it was thought that a common government representative of the people of all the integrated States would operate as a unifying force and attenuate the disruptive local affiliations. So the only alternative was its conversion into centrally administered unit. So from 1st January, 1950 Government of India took over the administration of the State to be ruled as Chief Commissioner's State.

Under Part C States Act of 1951, the State is provided with a Legislative Assembly and a Council of Ministers.

Chief Commissioner—SRI S. N. MEHTA

ANDAMAN AND NICOBAR ISLANDS

The *Andaman Islands* lie in the Bay of Bengal, 120 miles from Cape Negrais in Burma, 780 from Calcutta, and 740 from Madras. Five large islands closely grouped together are called the Great Andamans, and to the south is the island of Little Andaman. There are some 204 islets, the two principal groups being the Ritchie Archipelago and the Labyrinth Islands. The total area is 3,143 sq. miles. The Great Andaman group is about 219 miles long and, at the widest, 32 miles broad. The group, densely wooded, contains many valuable trees, both hard wood and soft wood. The best known of the hard woods is the padauk or Andaman red wood; gurjan is also well-known and is in great demand for the manufacture of plywood. Large quantities of soft wood are supplied to match factories.

The islands possess a number of harbours and safe anchorages, notably Port Blair in the south, Elphinstone and Bonington in the middle and Port Cornwallis in the north. The original inhabitants of the islands are of a small Negrito type who live in the forests by hunting and fishing. They have no fixed habitation, and do no cultivation; their civilization is about that of the Stone Age. Their numbers are not known as they prefer to avoid all contact with civilization. The total population of the Andaman Islands (excluding the aborigines) is 30,963 according to 1951 census. Coconut, coffee and rubber are great sources of income. The islands are slowly being made self-sufficient in paddy and rice, and now grow approximately half their annual requirements. No proper survey of the mineral resources of these islands has yet been undertaken.

From 1858 to March 1942 the islands were used by the Government of India as a penal settlement for convicts serving life sentences and long terms. The islands were occupied by the Japanese forces on the 23rd of March, 1942, and reoccupied by the Allies on 8th October, 1945. On reoccupation the penal settlement was abolished.

The Andaman Islands are administered by the President acting through a Chief Commissioner and an Advisory Council of 5 Members. The seat of administration is at Port Blair, which is connected with Calcutta and Madras by a mail steamer which calls approximately once every 3 or 4 weeks at Port Blair. The islands are connected to India by wireless telegraphy.

The *Nicobar Islands* are situated to the south of the Andamans, 75 miles from Little Andaman. The British formally took possession in 1869. There are 19 islands, 7 uninhabited; total area, 635 square miles. The islands are usually divided into 3 groups (southern, central and northern), the chief islands in each being respectively, Great Nicobar, Camotra with Nancowrie and Car Nicobar. There is a fine land-locked harbour between the islands of Camotra and Nancowrie, known as Nancowrie Harbour. The coconut is the main item of trade, and a major item in their diet; and they have been cultivating the coconut for as long as anyone can remember.

The Nicobar Islands were occupied by the Japanese forces in July 1942; and Car Nicobar was developed as a big supply base. The Allies reoccupied the islands on the 9th of October 1945. The Japanese built some roads in Car Nicobar and a small jetty at Malacca in Car Nicobar. They also built a small jetty in the harbour at Nancowrie.

The islands are part of the Chief Commissionership of the Andaman & Nicobar Islands; and the Government is represented by an Assistant Commissioner at Car Nicobar. *Capital*—Port Blair.

Chief Commissioner—A. K. GHOSE, I.C.S.

STATES BORDERING INDIA

SIKKIM

Sikkim lies between India and Tibet and is flanked by Nepal and Bhutan. The Singalila and Chola ranges which run southward from the main chain of the Himalayas, separate Sikkim from Nepal on the west and from Tibet and Bhutan in the east. The country has an area of 2,745 sq. miles, it extreme length from north to south being 73 miles and its extreme width 55 miles. Its population is 135,646 according to 1951 census and Buddhism is the religion of the ruling family.

Rhododendrons are one of the glories of Sikkim. There are as many as 40 species of them. There are about 500 different kinds of orchids in Sikkim.

Sikkim had long been treated as an Indian State but with a special position in view of its geographical situation. Political relations between

India and Sikkim is dated from 1817 and until the transfer of power in August 1947, they were regulated by a treaty signed in 1861. Since the transfer of power, these relations were governed by a Standstill Agreement which broadly speaking, kept the old arrangements alive until a new treaty had been negotiated.

A new treaty between India and Sikkim has been signed on 5th December, 1950 providing for the continuance of this State as a protectorate of India enjoying autonomy in regard to its internal affairs. By it, all previous treaties between British Government and Sikkim were cancelled. The Government of India is responsible for the defence and territorial integrity of Sikkim. It has the right to take such measures as it considers necessary for the defence of Sikkim or the security of India. In particular, the Government of India has the right to send troops any where within Sikkim. Government of Sikkim shall not import any arms, ammunitions or other warlike materials without the previous consent of the Indian Government. The external relations of Sikkim is conducted and regulated solely by the Government of India and Sikkim shall have no dealings with any foreign power. Government of India have the exclusive right of constructing, maintaining and regulating railways, aerodromes, ports, telegraphs, telephones, wireless in Sikkim. Indian nationals within Sikkim is subject to the laws of Sikkim and subjects of Sikkim within India is subject to the laws of India. Government of India agreed to pay Rs. 1 lakhs annually to Sikkim. *Capital*—Gangtok.

Ruler—H. H. THE MAHARAJA OF SIKKIM

BHUTAN

Bhutan is a small semi-independent State lying on the south-east slope of the Himalayas bordered on the south and west by the Union of India.

Bhutan did not belong to the category of Indian States in the usual sense of the term. Before the conclusion of the new treaty between the Governments of India and Bhutan, which was signed at Darjeeling on August 8, 1949, the main instruments governing India's relations with Bhutan were the Sinchula Treaty of 1865 as amended by the Treaty of 1910, between the former Government of India and the Government of Bhutan. Under the treaty of 1949, the Government of India undertook to exercise no interferences in internal administration of Bhutan. On their part, the Government of Bhutan agreed to be guided by the advice of the Government of India in regard to their external relations. The Government of India is to pay to Bhutan annually a sum of rupees five lakhs. Government of India also returned to Bhutan Government, about 32 sq. miles of territory known as Dwangiri. The treaty provides among other things, that Bhutan shall be free to import with the assistance and approval of the Government of India whatever arms, amunitions warlike materials or stores may be required for Bhutan. This arrangement will hold good so long Government of Bhutan is friendly to India and there is no danger to India for such imports. Bhutan also agreed that there should be no export of arms and amunitions across the frontier of Bhutan either by the Government of Bhutan or by private individuals. The treaty also provides for extradition. *Capital*—Punakha.

Ruler—H. H. THE MAHARAJA YIGME WANGCHUK

NEPAL

Nepal is a land-locked country between India and Tibet. Its area is about 56,000 sq. miles with a population of about 5,580,000. The greater part of the country is mountainous. The relations of Nepal with the Government of India were regulated by the treaty of 1816 and subsequent agreements. With the transfer of power in India, the two governments have exchanged representatives at the highest level. Nepal has also established international relations with England and U.S.A. Nepal has three distinctions *i.e.*, it is the only Hindu Independent State of the world, it contains Mount Everest, the hight measured mountain in the world. It produces the toughest fighting men in the world—the Gorkhas.

The ruling power had been so long the hereditary Ranas. Though theoretically the king was supreme ruler but the real power was vested in the Prime Minister. This domination by an aristocratic hereditary party was always resented by general mass of the people and this unrest came to a head in 1950, when insurgents rose against the Rana rule and tried to establish a democratic form of Government. The king who was always sympethetic to this popular cause fled to India. After much fighting and at the intervention of Government of India, a compromise was effected under which a coalition ministry was formed. But it did not work smoothly; so the government have passed into the hands of popular ministry to the entire exclusion of the ruling Ranas.

Two treaties—one treaty peace and friendship and other a treaty of trade commerce have been signed between the Governments of India and Nepal on July 31, 1950. In the first treaty, two governments agree mutually to acknowledge and respect the complete sovereignty, territorial integrity and independence of each other. India and Nepal will inform each other of "any serious friction or misunderstanding" with a neighbouring state likely to impair their relations.

Two Governments agreed to appoint Consuls-General. Government of Nepal shall be free to import from and through India, arms, ammunitions or warlike meterials and equipment necessary for the security of Nepal. Both Governments agreed to grant on a reciprocal basis, to the nationals of one country in the territories of the other the same privileges in the matter of residence, ownership of property, participation in trade and commerce, movement and other privileges of a similar nature. In economic matters, each government guarantees "national treatment" to the citizens of the other in its territory. *Capital*—Khatmandu.

King—HIS MAJESTY TRIBHUBANA BIR BIKRAM SHAH DEVA

Cabinet

Mr. M. P. Koirala (Prime Minister)—General Administration and Foreign.

Maj-Gen. Subarna Shumshere—Finance.

Mr. Surya Prasad Upadhya—Home, Information and Broadcasting and Food.

Mr. Bhadrakali Misra—Works, Communications and Transport.

Mr. Ganeshman Singh—Agriculture, Animal Husbandry and Land Administration.

Mr. Mahendra Bikram Shah—Industries, Commerce and Civil Supplies.

Maj-Gen Mahabir Shumshere—Planning and Development (including Electricty, Forest and Mines).
Mr. Naradmuni Thulung—Local Self-Government.
Mr. Khadgaman Singh—Parliamentary Affairs.
Maj-Gen Sharda Shumshere—Education.
General Kaisher Shumshere—Defence.
Mr. Bhagwati Prasad Singh—Law and Justice.
Capt. Nar Bahadur Gurung—Ministef of State for Health.
Mr. Dharam Ratan—Deputy Minister for Food.

TIBET

Tibet occupies a strategic position between the northern frontier of Indian continent and borders of Soviet Russia and communist China. With an area of some 460,000 sq. miles, she has a population which is thought to be near five million and of these it is said over 800,000 are Buddhist monks living in 3,000 monsteries that are to be found scattered about the country. The altitude of Tibetan plateau averages 15,000 ft., but of course there are many mountains considerably higher. Communications are for foot-traffic only and journeys must be reckoned in days and weeks. But it is quite wrong to think that the whole country, as bleak, barren and cold. It is Chang Tang, the northern plateau, that is tree-less, wind swept, barren area. To the east and south-east the deep gorges of the rivers make that part a terrain that is difficult to penetrate. Much of the rest of the country is fertile and produces good crops. There are excellent grazing grounds in western Tibet, described as a land of 'milk and honey' in old Sanskrit books.

Buddhism came into the country from India in the 8th century and the Tibetan has moulded it into the present form of Lamaism. The strong religious leader during 10th to 13th centuries was a Bengali religious reformer Atisha and he was intrumental in spreading Buddhism in the country.

The present Dalai Lama is a minor and was discovered in 1935 two years after the death of the provious and 13th holder of the position.

The Chinese influence and power on Tibet began early in the 18th century when Chinese Emperor invaded the country and established authority. But Chinese influence on Tibet was always loose and at the end of the 19th century is was merely nominal.

An Anglo-Chinese Convention was signed in 1890 under which a trade centre was opened at Yatung in Tibet but it was never looked upon with favour by Tibet which often violated this convention. As a result of this, a Tibet Mission under the leadership of Col. Younghusband was sent to Lhasa, when a fighting took place between Tibetans and the British. So Tibetans were forced to sign a new convention in September 7, 1904 providing for erection of boundary posts between Sikkim and Tibet, opening of three trade marts, unrestricted traffic by existing routes and payment of heavy indemnity. This convention of 1904 was again ratified in 1906.

From 1906 the Chinese Government tried to establish greater authority over Tibet by force, and Dalai Lama had to flee from the country, but in 1912 when Chinese revolution took place, Tibetans wał able to drive Chinese almost beyond Tibet. Dalai Lama returned to Lhasa from India where he had taken shelter. In 1913 a tripartite Conference was held in Simla between the Chinese, Tibetans and the British to settle their mutual relations. but at the last moment the Chinese withdrew from the Conference and the British and Tibetans signed a treaty which settled the relations between the two countries.

From 1918 to 1933 there were constant friction and fighting between the Chinese and Tibetans which kept the relation between two countries always' confused. In 1918 the Tibetans almost completely cleared the country of Chinese troops. With the death of 13th Dalai Lama in 1933 the country was being ruled by a regent. 14th Dalai Lama, the present occupant assumed the charge of the country in Sept., 1939. In 1923 the Panchen Lama (second important Lama, also known as Tashi Lama) had to flee to China due to quarrel with Dalai Lama where he died in 1937. A new incarnation found out as Panchen Lama was not accepted by Dalai Lama. This divided the country into parties. Communist Government in China now tried to establish its firm hold on Tibet and took up the cause of Panchen Lama and invaded the country on the pretext of liberating Tibet in 1950. The Communist Government of China have greatly consolidated their position and Chinese garrisons have been placed in almost all parts of Tibet.

So far as Indo-Tibetan relation are concerned, it is quite friendly the Indo-Tibetan relation is on the basis of those concluded with the British Government. There are Indian Trade Agents at Gyantse, Yatung and Gartok and a representative of Indian Government resides at Lhasa.

Ruler—HIS HOLINESS THE DALAI LAMA

PAKISTAN

Area—The area of Pakistan is 365,907 square miles which is about equal to the combined area of France, Italy, Belgium and Holland.

Pakistan comprises two regions, generally spoken of West Pakistan and East Pakistan lying respectively to the north-west and north-east of India. While West Pakistan embraces practically the whole of the valley of the Indus and its tributaries on either side, East Pakistan covers the vast lower valley of the Brahmaputras. The two regions are separated from each other by about a thousand miles of Indian territory. The distance between two Pakistans by sea is 3,000 miles.

Western Pakistan—It comprises the West Punjab, Sind, Baluchistan, North-West Frontier Province and the tribal areas and states that lie between that province and Afghanistan and the other acceding States. The West Pakistan contains ruins of the Indus valley civilization at Mohenjo-Daro in Sind and Harappa in West Punjab. The excavation of Mohenjo-Daro and Harappa have proved that some five thousand years ago there flourished in this region a highly civilized community. Muslims formed 76·5 per cent of the population of West Punjab when Pakistan came into existence in 1947. West Pakistan includes some of the finest agricultural regions in the world.

East Pakistan—Though fringed with hills on its northern and eastern borders, East Pakistan is almost wholly a country of plains. Few parts of it are more than 600 feet above sea level. It is watered by mighty rivers such as the great silt-bearing Brahmaputra and the channels into which the Ganges pours itself in its rush towards the sea. The monsoon winds bring an abundance of rainfall and consequently there are in addition snow-fed rivers, innumerable streams, large and small and depressions full of water. On the water course ply steamers and other crafts which are the principal means of transportation in the area. The main occupation of the people is agriculture and fishing and their diet is rice and fish. Eastern Pakistan is the largest and the most populous province of Pakistan.

DESCRIPTION OF PROVINCES

Punjab—comprises the western part of the former Punjab province as defined by Sir Cyril Radcliffe's boundary award. Under the award, the districts attached to Pakistan are (*a*) Lahore division with Lahore, Gujranwala, Gurdaspur, Sheikpura and Sialkot as its main centres, (*b*) Rawalpindi division including Rawalpindi, Attock, Jhelum, Mianwali and Shahpur, (*c*) Multan division including Multan, Dera Ghazi Khan, Lyallpur, Montgomery and Muzaffargarh. The name "Punjab" now is appropriately applied to this province, as actually all the five rivers, Indus, Jhelum, Chenub, Ravi and Sutlej flow through this province. Wheat is the most important crop of this province. Cotton of superior quality is extensively cultivated.

North-West Frontier Province—is the most strategic province of Pakistan and was incorporated in Pakistan as a result of the referendum in July 1947. It consists of the settled districts and tribal areas; the former with an area of 13,815 sq. miles and later with 27,242 sq. miles. The province (settled districts) has a population of 32,39,000 and 24,60,000 in tribal areas according to 1951 census.

Roughly, the North-West Frontier Province is the country lying north of Baluchistan between the Indus and the Durand boundary line of Afghanistan. With a total area of 39,276 square miles (greatest leigth 408 miles, greatest breadth 279 miles), it stretches to the north as far as the Hindu Kush, the "*Indian Caucasus*" range; from there a long, though not unbroken line of mountains running south forms a natural Pakistan-Afghan frontier until the Sulaiman Range shuts off the province of Baluchistan. The province falls into three distinct geographical sections; the cis-Indus district og Hazara; the "settled districts" of Peshawar, Mardan, Kohat, Bannu and Dera Ismail Khan, lying between the Indus and the mountain range of the north; and the wild, rugged, arid and stony country on the north and west between the settled districts and the Durand Line or the Pakistan-Afghan border.

The general impression of the Frontier province is a rugged, almost barren country of rock and shale and wild and forbidding highland glens interspersed here with a few forests, dotted there with well-irrigated dales. Communications are magre. The system of light railways includes the main Rawalpindi-Peshawar line, which was extended, in 1925, nine miles to Jamrud, at the entrance to the Khyber, and further extended 27 miles through the Khyber to Landi Khotal on the Afghan border. There are some 32 tunnels on the way, the longest being 1,400 ft.

The focal point of interest on the Frontier is, of course, the Khyber Pass—grim, unmoving, silent, sentinel through which came all the conquerers of India.

Sind—which came into existence as a separate entity as result of the division of the Bombay Presidency on April 1, 1936, has an area (excluding Khairpur State) of 50,443 sq. miles and a population of 46,19,000 according to 1951 census. Sind coast lines are nearly 150 miles long. Large part of Sind belongs to Great Indian Desert.

Recent archæological discovery has given Sind an authentic title to priority as a metropolis of civilization. It was at Mohenjo Daro in the Larkana district of Sind where were first disclosed the relics of the great Indus valley culture which has opened a new chapter rivalling Sumaria in the origins of civilizattion.

In Sind climate is extreme, very hot in summer and cool in winter. This is due very largely to the absence of moisture or any other equalising influence. The dry sand absorbs heat rapidly during day time and radiates it as quickly during the night. The annual rainfall is only about 4 inches, monsoon being practically absent, owing to the absence of lateral mountain ranges to condense the moisture.

Sind depends for cultivation on irrigation from Indus. Wheat and barley are its chief crops. The most famous barrage is Lloyd Barrage.

Baluchistan—has a total area of 52,900 sq. miles and a population of 6,22,000 in Baluchistan proper and 5,56,000 in Baluchistan States according to 1951 census and comprises (*a*) Frontier British Baluchistan proper (*b*) leased and tribal areas, (*c*) Baluchistan States covering 79,546 sq. miles of which Kalat and Las Bela are the most important. The Province is predominantly Muslim. The climate is semi-desert or desert. The province is outside the influence of monsoon. It is a very dry plateau. The whole of Baluchistan forms one natural region. Rainfall does not usually exceed 8 inches in a year. The density of population is the smallest of all provinces of India and Pakistan. The people belong to the three principal races,—Brahui, Baluchi and Pathan. Most of the territory of Baluchistan consists of four States Kalat, Las Bela, Ukaran and Makran, the latter nominally a feudatory of the former. Khan of Kalat exercises only a vague suzerainty. Outside these is Baluchistan proper.

An important railway runs from Sind through Bolan Pass to Quetta and Chaman. Afghanistan, Persia and N.-W. F. Tribal areas are close neighbours of Baluchistan. Baluchistan administration is directly under the Centre with a Baluchistan Council to advice the Agent to the Governor-General. Also two Advisers have been appointed.

East Pakistan—consists of East Bengal and Sylhet district. Eastern Pakistan is almost wholly a country of plains. Few parts of it are more than 600 feet above sea level. It consists following districts—(*a*) Chittagong Division including the districts of Chittagong, Noakhali, Tippera and Chittagong Hill Tracts, (*b*) Dacca Division including the districts of Dacca, Faridpur, Bakerganj and Mymensingh, (*c*) Rajshahi Division including the districts of Rajshahi, Rangpur, Pabna, Bogra, Dinajpur, Kushtea, Jessore and Khulna. The population of East Pakistan according to 1951 census is 4,21,19,000 and area is 54,501 sq. miles.

Pakistan States—The States that have joined Pakistan are as follows—*Bhawalpur, Kalat, Khairpur, Las Bela, Kharan, Chitral, Dir, Swat, Amb* and *Phulera.*

Bhawalpur is in the extreme south-west of Punjab. The state has an area of 15,980 sq. miles with a population of 18,20,000 according to 1951 census. The general appearance of the land is barren. There are no hills, no streams except a few pools and backwaters of Sutlej, Chenab and Indus rivers. Main agricultural products are wheat, gram, dates, mangoes, fruits and cotton.

Kalat is the biggest State in Pakistan. It lies on the western border of Pakistan. It has an area of 53,995 sq. miles with a population of 2,53,305.

Except for the plains of Kharan, Kachhi, Dasht in Makran the whole country is mountainous. The general appearance of these rugged, barren and sunburnt mountains indicates the deficiency of water in the whole of the State. The soil is generally sandy. The staple food of the people is wheat and jawar. Rice, barley, millet, tobacco, potatoes and melons are also cultivated on a comparatively small scale. Pomegranate, apricot, almond, mulberries, vine and apple are grown and exported. Marri, Kachhi and Sarwan are famous for the excellent breeds of cattle and horses. Coarse wool of dark coloured sheep and goats is exported in large quantities.

The whole state is divided into five divisions—Kachhi, Sarawan, Jhalawan, Makran and Kharan. The latter is semi-independent.

Khairpur State lies in Upper Sind with an area of over 6,000 sq. miles. The climate is hot and dry, because the average rainfall is never more than 15″ per year. Agriculture is the chief occupation of the people. Wheat, cotton and other grains are the main products.

Las Bela is 115 miles from Karachi. The State has an area of 7,043 sq. miles with a population of 69,067. Its average revenue per year is Rs. 5,00,000.

Chitral lies in the north-west of Western Pakistan. It has an area of about 4,000 sq. miles. The population of the state is 80,000. The valleys of the state are extremely fertile. Wheat, baley, maize, and rice are grown abundantly.

Dir is a small state of 3,000 sq. miles with a population of 80,000.

Swat is situated in the valley of Swat river on the borders of N.W.F. Province. It can be divided into two sections—Swat Kohistan and Swat proper. Fruit is the main commodity which is exported outside.

Amb is situated in the upper valley of the Indus. Its area is only 225 sq. miles and a population of about 47,916.

Phulera is another small State. It consists of 98 small villages with population of 8,759.

Religion—The dominant religion of Pakistan is Islam. Hindu population in Western Pakistan is now very small after mass evacuation following the communal riots. In East Pakistan due to migration Hindu population would be less than 20 p.c. There is considerable Christian population in West Punjab.

Races—The three main races are Turko-Iranians, Mongolo-Dravidians and the Indo-Aryans. The Turko-Iranian type formed by a fusion of Turki and Persian elements in which former predominants, is represented by the Baloch, Brahui and Afghans of Baluchistan and N.-W. F. Province. The most numerous people of N.W.F.P. are Pathan. Indo-Aryan type is found in West Punjab. Mongolo-Dravidian or Bengali type is found in East Bengal. Hindus and Muslims of both Bengal belong to this type. This type is a mixture of Dravidian and Mongoloid elements with a strain of Indo-Aryan blood in the higher groups.

Language—In the extreme north-west of Pakistan, *Baluchi*, *Pushtu* and *Brahui* languages are spoken. The principal language of N.-W. F. Province is Pushtu which does not belong to the Indo-Aryan family of language. The language of Sindh is *Sindhi* written in Perso-Arabic script. Urdu is the main language in Punjab. But Punjabi is also spoken by the large number of people in Punjab, which is a sister dialect of *prakrit* and bears a close resemblance of Urdu. Bengali is spoken by the 99 per cent of the East Bengal and Sylhet. Urdu has been prescribed as the official language of Pakistan Government.

The Constitution—The directly administered areas of Pakistan comprise the Punjab, Sind, North-West Frontier Province and East Bengal (including the district of Sylhet from Assam) as well as certain areas in Baluchistan, including some originally released to the British by the Khan of Kalat. In addition, the States of Bhawalpur, Khairpur and Chitral (including Mekran and Kharan) and Las Bela have acceded to Pakistan, and delegated the control of Defence, Foreign Relations and Communications to the Centre, retaining for themselves control of all other subjects. To these should be added the tribal territories, with which relations are maintained through the Governor of N. W. F. Province as the Agent to the Governor-General; the States of Dir and Surat whose status is more or less that of the tribes with the exception that their rulers have hereditary rights, and the Chittagong Hill Tracts, which are the special responsibility of the Governor-General through the agency of the Governor of the East Bengal.

The constitution of Pakistan has not yet been drawn up. The provisions of the Government of India Act, 1935 with certain amendments and excisions apply and the Constituent Assembly exercises the power of a Federal Legislature until the new constitution is framed.

Pakistan Citizenship—Pakistan Citizenship Act was passed on April 9, 1951. The conditions for Pakistani Citizenship and Naturalization are as follows:—

Besides citizenship by birth and descent, the Act also provides for citizenship by migration for refugees from India after one year's residence in Pakistan; laid down that persons born in the sub-continent but living abroad could claim Pakistani citizenship after a domicile of one year in Pakistan, though the domicile qualification would be automatically waived in the case of persons resident abroad possessing Pakistani passports; allowed for the grant of Pakistani citizenship at any time to nationals of a commonwealth country provided that reciprocal facilities to Pakistanis were offered by the country concerned; permitted naturalisation of foreigners after five year's residence, and if certain other qualifications were fulfilled; and stipulated that wives would not assume the nationality of their Pakistani husbands automatically but only on application, except where they were themselves commonwealth citizens, and that Pakistani women would not loose their nationality by marrying an alien.

Pakistani nationals would enjoy the status of commonwealth citizens, but dual citizenship will otherwise not be recognised except in such cases where the laws of the other country do not allow renounciation of citizenship; persons born in what is now the Dominion of Pakistan who have left the country since August 15, 1947 are excluded from Pakistani citizenship. Finally Pakistani nationals may not renounce their nationality, but a naturalized Pakistani may be deprived of his citizenship if he has obtained his naturalization through fraud or false representation, or has been disloyal to Pakistan, or has engaged or associated with the enemies of Pakistan during a war, and if such deprivation is found to be necessary in the public interest after inquiry by a special committee.

Climate—West Pakistan is dry and barren, while East Pakistan is very wet and evergreen with vegetation. Dryness and heat with hot winds are the predominant features of the climate of Western Pakistan in summer, while chilly weather and some rains are there in winter. The average rainfall in Western Pakistan varies from about ten to twenty inches a year. East Pakistan on the other hand has more or less uniform temperatures ranging from 60°F to 70°F. The rainfall varies from 75 inches to about 160 inches, both S.-E. and N.-E. monsoons contributing their shares. Climate of Sind is of semi-desert type with very hot days with storms in summer and very cool in winter. Rainfall is only 3 to 9 inchse.

Agriculture —Agriculture is the mainstay of the Dominion. Pakistan's position regarding agriculture is superior to India. The soil is naturally fertile and while Eastern Pakistan has an abundance of rainfall, Western Pakistan has one of the world's finest systems of canal irrigation. The total area under cultivation in both the regions is roughly 43,900,000 acres. The principal agricultural produce of Pakistan is rice, wheat, jawar, bajra, maize, cotton, tobacco and jute. Food crops mainly rice and wheat account for 77·5 p.c. of the total area under principal crops. Rice takes up more than half of the total area under food crops. About 75 per cent of Indian jute is produced in Pakistan and along with long and medium staple cottons of West Punjab and Sind, she occupies an enviable position. Main centre of Pakistan's rice production is East Bengal. Pakistan is an agricultural surplus area and normally has a surplus for export. Rice is the staple food of East Bengal, while wheat is the staple food of Western Pakistan. Jute and cotton are the most important commercial crops of the country. Other important food crops are gram, bajra, jowar, maize and barley which are produced entirely in West Pakistan.

But Pakistan has deficiency in the following agricultural products—millet, sugar, tea, coffee, for which she has to depend on other countries.

Wheat—Both West Punjab and Sind are surplus wheat areas. The production area is West Punjab, Sind and States of Bhowalpur and Khairpur. It accounts for about 25 p.c. of the total food crop area.

Gram—Pakistan's share in gram production is about 15 p.c. of total Indian production.

Sugarcane— the sugarcane cultivation is mainly confined to West Punjab and East Bengal. But the production is small to meet the entire requirement.

Rice—East Bengal is the richest area in Pakistan for production of rice. Sind is also a surplus rice area.

Oil seeds—Pakistan is heavily deficit in edible oil seeds. She is however an important producer of cotton seed.

Cotton—Comes from West Punjab, Sind and States of Bhawalpur and Khairpur and also a small quantity from N.-W. F. Province. Best variety of India cotton is produced in Pakistan (West Punjab and Sind). Pakistan produces one-third of the raw cotton of undivided India. The best long staple varieties of "Indian cotton" are grown almost entirely in Pakistan. The superior varieties of cotton, the *Sind American* and *Punjab American*, both of which have staples over one inch long are grown entirely in Pakistan. Pakistan also grows considerable quantities of medium staples (⅞" to 1"). She can export over 125 million dollars worth of cotton annually.

Silk—The chief areas of silk production is Rajshahi district, Rangpur district and Bogra district of Eastern Pakistan.

Jute—Between their Pakistan and India hold a world monopoly of jute, of which Pakistan produces about 75 p.c. The total production is about seven million bales a year, worth Rs. 1100 million. The bulk of the crop is, and will continue for some time to be, exported. All pressing factories are now situated in Indian Union. But new factories are being started in Eastern Pakistan.

Tobacco—Pakistan's production of tobacco mainly comes from Eastern Pakistan such as Rangpur, Dinajpur and Chittagang Hill Tracts. Certain quantities are also grown in the Punjab, Sind, and N.-W. F. Province.

Wool—The N.W.F.P. produces 3,200,000 lbs. of wool annually and sheep found in Kagan yields wool which can be matched with the finest wool in the world. Pakistan wool is practically all of carpet variety, although small quantities of superior grades are produced. Wool is also available in West Punjab, Sind and Baluchistan.

Tea—is produced mainly in Sylhet and Chittagong and Tippera areas of East Bengal and it has an exportable quantity of tea.

Trade—Pakistan's chief exports are cotton and jute, which together make up well over half the value of the country's export trade, followed by hides and skins, fish and fertilisers etc. in that order.

Pakistan's imports comprise iron, steel and other metals, machinery, mill-stone, coal, mineral oils, cotton, woolen and silk yarn and cloth, motor cars, bicycles, radios, instruments and apparatus of various kinds, china and glassware, medicines, drugs and luxury goods. The most important of manufactured goods are cotton textiles which account for about 50% of the total imports. India, United Kingdom and U.S.A. are the principle exporting countries.

Raw jute, raw cotton, tea, food grains, rock-salt, livestock, wool, hides and skins, tobacco and dried fruits may be described as the staples of Pakistan's export trade. Products of Pakistan's sports goods industry and surgical instruments and cutlery have also found their way to all markets of the world. Shawls and blankets are also exported everywhere.

The principal item of export is raw jute, its annual production being estimated at about 70,00,000 bales worth more than Rs. 100 crores. Almost entire jute crop is exported. India is the principal buyer.

Pakistan has long frontiers with India, Afghanistan, Iran, and the U.S.S.R. in the west and with India Burma in the east. This contiguity by land has given special importance to the land frontier trade of Pakistan.

Railways & Communications —Consequent on the partition of India, the old N. W. Ry. and Bengal-Assam Railway have been divided; the portion of the N.-W. Railway falling within the area of Pakistan is now known by the old name, *North-Western Railway*. It has a rough length of 5,362 miles and enjoys the distinction of being the largest railway system in Pakistan. Similarly major portion of Assam-Bengal Railway falling within Eastern Pakistan is now known as *Eastern Bengal Railway*. In East Pakistan there are 1,620 miles of railway system. *Jodhpur Railway* has also being divided, portion falling within Pakistan has gone to Pakistan railway system. The two Pakistan railways are separated from each other by a distance of about 1200 miles across Indian railways.

N. W. Railway runs from (1) Karachi to Peshawar *via* Multan and Lahore, (2) from Karachi to Peshawar *via* Dera Ghazi Khan and Mianwali, (3) from Karachi to Quetta. Jodhpur Railway gose from Hyderabad to Luni through Thar desert. There are over five thousand miles of railway and 35,000 miles of metalled and unmetalled roads, further augmented by about 10,000 miles of emergency canal-bank rods in Western Pakistan. In East Pakistan, besides roads and railways, a net work of internal waterway provides one of the cheapest and most useful systems of transport. East Bengal Railway is over 1600 miles long and metalled and unmetalled roads cover over 20,000 miles in East Pakistan.

Forests—Pakistan's forest resources are very much less than its requirements and a large part of it is situated in East Bengal, in the Chittagong Hill Tracts. It is universally accepted, for the balanced economy of a country, that at least 20 to 25 p.c. of its area should be under forests. In Pakistan forests cover only 5·0 per cent of the total areas. The forest resources of Pakistan consists of pine, sheesham and sprouce. Bamboo and sabai grass from which paper could be made, are also plentiful. In Eastern Pakistan, the percentage of forests is 9·7, while in Western Pakistan it is only 2·9. Western Pakistan being a dry-land has very few forests and forest products in consequence. In Eastern Pakistan, there are tidal forests, such as Sundarbans and a forest belt on Lushai and Chittagong Hill Tracts. Timber, bamboo, resin, gum, honey are the chief products of East Bengal forests. A forest college has been started at Upper Topa (Murree Hills) in 1948.

Irrigation—The Partition cut across the major irrigation system of the sub-continent, leaving in India many of the head works of the canals of fundamental importance to the whole of the (undivided) Punjab, as well as the source of hydro-electric power on which the undivided Punjab also formerly drew.

The low rainfall of West Pakistan makes efficient cultivation impossible without irrigation, particularly for such crops as rice and sugar which require a regular and sufficient water supply. In West Punjab, over many years, an extensive system of canal irrigation has been built up, particularly in the Punjab. In East Bengal, where conditions are different, the irrigation is small, though new schemes are under consideration.

Pakistan is irrigated mainly by canals—inundation and perennial—and to some extent by tube-wells. Inundation canals draw water direct from the rivers only when the latter are in flood. Perennial canals are fed from a barrage system. The Lloyd Barrage at Sukkur opened in January 1932 which cost approximately Rs. 24 crores and irrigates about 5½ million acres, is the most important work. The lower Sind Barrage at Kotri is now under construction which is expected to be completed in 1953.

There are number of other irrigation projects in East Bengal, the Punjab, N.W.F. Province and Baluchistan. The most important of these are the *Thal Project*, the *Rasul Tube-well Project* and *Warsak Multi-purpose Scheme*. The Thal Project is designed to draw water from the Indus. The Project is expected to bring 693,200 acres under cultivation by the end of 1953-54. The Rasul Tube-well Project involves the installation of some 1,800 tube-wells to provide additional sub-soil water and to assist in reclaiming water-logged land.

Hydro-Electric Power Development—Pakistan is rich in water power; a rough estimate places the potential at 5 to 6 million kw. The main projects are (1) the *existing Hydro-Electric station at Malakand* which utilises the waters of the upper Swat river. (2) *Dargal Project*—a natural fall of 250 feet with a discharge of about 1,000 cusecs is available about

4 miles down stream from the Malakand station. (3) *Rasul Hydro-Electric Scheme*—a lot of work has been done on the Rasul Project in the Gujarat district of the Punjab which utilises the difference of level between Upper Jhelum and Lower Jhelum canals by construction of a link canal. (4) *Mianwali Hydro-Electric Scheme*—approval has been given to the completion of Stage I of the Mianwali Hydro-Electric Scheme.

The consulting engineers of Pakistan are now engaged in preparing a detailed report on a multi-purpose project at Karnafuli in East Bengal. The project involves the erection of a hydro-electric station, with an installed capacity of 40,000 kw., flood control and control of flow of water in the Karnafuli river.

Livestock and Fisheries—In the agricultural economy of Pakistan, livestock plays an important role. Pakistan produces annually 4,000,000 pieces of hide and 5,000,000 pieces of skin. Those are exported mostly to Europe and America, as also 250,000 tons of bones. Pakistan possesses some of the best breeds of cattle, heep, goats, horses and camels. The well-defined breeds of cattle are Red Sindhi and Sahiwal for milk, Thari, Bhagnari and Dhanni for draughtfi Lohani and Rojhan, a light type. Ravi and Nili are well-known buffalo breeds. The total bovine population is estimated at 30 million but the bulk of it, particularly in Eastern Pakistan is of poor quality. Most of the sheep population is confined to Western Pakistan. The important sheep breeding areas are N.-W. F. P., Baluchistan and Sindh. The important breeds of sheep are fat-tailed Hashtnagri, Harnai, Bibrik and Waziri and thin-tailed Demani, Kaghani and Sohi. Baluchistan and West Punjab are the best horse breeding areas. Camels are bred in the arid regions particularly in Sind, Bhawalpur and Makran.

In fisheries too, Pakistan has abundant resources. East Bengal, Sind and Baluchistan have access to marine fisheries. The Gangetic delta of the Sunderbans and Indus delta are extremely rich in estuarine fisheries. Eastern Pakistan is exceptionally rich in fisheries resources. East Bengal exports its surplus fish to West Bengal.

Among the new irrigation projects, the Thal and Haveli projects are under execution in West Punjab.

Minerals—Pakistan is not rich in mineral resources excepting in chromite, gypsum and to some extent in petroleum. Baluchistan has considerable untapped mineral wealth. In Chitral, Pakistan has the sub-continent's only deposits of antimony.

Chromite—It is the only major mineral available in Pakistan (in Hindubagh of Baluchistan). It is the second largest chromite deposit in the world.

Sulphur—Largest known deposit of sulphur in Pakistan is in the Kalat State of Baluchistan and also available in Koh-i-Sultan mountain in Baluchistan.

Fuller's Earth—is available in West Punjab and N.-W. F. Province.

Petroleum—Production of pertoleum for undivided India was 81·99 million gallons in 1945 of which Pakistan area's share was estimated at 12 million gallons. The only important oilfield is Karur in the West Punjab and Dhulian.

Gypsum—Pakistan has extensive deposits of gypsum, mostly in the Punjab, but also in N.W.F.P. Resources are estimated at over 30 million tons.

Coal—Tertiary coal which accounts for only 1·83 p.c. of the total coal resources of undivided India and which is not of much value occurs in West Punjab and Baluchistan. Except for an insignificant quantity of the tertiary variety, Pakistan has no coal resources. Tertiary belt of coal is found in Baluchistan and West Punjab (Shahpur, Mianwali and Jhelum).

Fireclay—The only source of fireclay in Pakistan is Ratucha mine.

Salt—Pakistan is rich in salt. It produces some of the purest rock salt in the world. It is available in the Khewra mines of the Punjab Salt Range. About 200,000 tons of pure rock salt are extracted from Khewra and Kohat mines. Excellent sea salt is also produced in coastal areas.

Industries—Pakistan is essentially an agricultural country. She has neither big industries nor developed mineral resources. Some of the important industries such as iron and steel, jute and paper do not exist in Pakistan. The share of Pakistan in soap, glass, chemicals, match, woollen and silk mills is negligible.

Its main cottage industries are rugs, carpets, grass-mating. It leads Indian sub-continent in the manufacture of sports goods in Sialkot. Sind produces salt, cement, cotton, woollen goods etc. In N.-W. F. P. Pakistan has plenty of sheep, poultry, drugs and fruit production. Some of the finest wools are to be found in this province. Date-palm is the chief production of Baluchistan. Sugar, rice, bamboo, jute, tea and tobacco are found in plentiful quantity in East Bengal. Baluchistan is practically one of the world's greatest fruit and vegetable growing areas.

Jute industry—want of bailing processes and mills in Pakistan is hampering the jute industry. But bailing processes are being rapidly established in Eastern Pakistan and schemes to start jute mills are being formulated.

Cement—There are five cement factories which approximately produce 320 tons per annum.

Sports goods—Sialkot in West Punjab is known throughout the world as producers of finest sporting goods. Varieties of wood necessary for the production of rackets, hockey sticks etc. are available in N.W.F.P., States or Dir, Swat and Chitral. With the abundant supply of hides and skins, Sialkot is producing sporting goods.

Cotton industry—Pakistan produces about 12,50,000 bales of 400 lbs. each annually. There are now 12 mills with 1,70,000 spindles and 4,550 looms in Pakistan.

Wool industry—The annual production of wool in Pakistan is 26·5 million lbs. and imports through land frontier amount approximately to 8·3 million lbs. The production is concentrated mainly in Western Pakistan. Pakistan's wool is taken in the world's market for the manufacture of towels, rugs, blankets and carpets.

Leather industry—The total amount production of buffalo hides, cow hides, goat hides and sheep skins is 800,000 pieces, 4·5 million, 5·3 million and 2 million respectively. A number of tanneries are working and more are being erected.

Cement—In West Pakistan there are at present four cement factories annually producing approximately 5,00,000 tons, while in East Bengal there is only one factory with a production capacity of 75,000 tons per annum. At present, West Pakistan is surplus in cement.

Cottage industry—The handloom industry and other industries which require cotton and wool yarn occupy a predominant position among the cottage industries of Pakistan. The art ware and cuff ware is popular in foreign countries. Soap is mostly produced in Pakistan as cottage industry.

Fruit industry—Baluchistan is the premier fruit-growing area of Pakistan. It produces large quantities of excellent fruits such as melons, apples, grapes, cherries, apricots, peaches, pears and plums. Fruits are being increasingly exported and it has developed into a big industry. N.W.F.P. and West Punjab are also great fruit-growing areas.

Currency and Banking—The State Bank of Pakistan came into being by the "State Bank of Pakistan Order, 1948". It has similar duties as those performed by the Central Banks of other countries. It is responsible for the management of currency and of the credit system of the country and for the maintenance of the internal and external monetary value of the rupee. It has the sole right to issue bank notes in Pakistan. The Central and Provincial Governments are obliged to entrust the Bank with all their money remittances, exchange and banking transactions and to deposits with it all their cash balances free of interest. The management of Public Debt, the purchase and sale of gold, silver and approved foreign exchange, the purchase, sale and rediscount of securities of countries whose currency has been declared as approved foreign exchange and the making of loans and advances to governments, scheduled and co-operative banks are some of the other items of business which the bank is authorised to transact. The State Bank is a government-cum-shareholders Bank, the government contributing 51 per cent of a total capital of Rs. 3 crores. The general superintendence and direction of the affairs of the Bank have been entrusted to a Central Board of Directors.

National Bank of Pakistan was established by the National Bank of Pakistan Ordinance 1949 on 8th Nov. 1949 with a share capital of Rs. 6 crores, of which the Central Government was to hold not less than 25 p.c. of any capital issued. It is a private shareholders' Bank with however, State contribution to its capital.

Statement of Industrial Policy—The Government of Pakistan's attitude towards the development of industry has been extensively set out in a Statement of Industrial Policy issued on 2nd April, 1948. The Statement defines the role of the Centre and the Provinces in industrial planning and development, the relation of the State to industry, the assistance to be given to industry, and the Government attitude towards participation of foreign capital. The Pakistan Government made the decision to assume responsibility for the planning of 27 industries and to the recognition of protection as a means of giving assistance to industry. The declaration also made clear the Government's attitude towards nationalisation. Such industries as communications services (posts and telephone) and certain transport services (railways) are already Government-owned and many Provincial Governments were already proposing to nationalise road transport. It is generally agreed in Pakistan that monopolies and public utilities are suitable for nationalisation. Apart from these and policy in regard to civil air transport which had already been announced and is described elsewhere in this report, and inland water transport, which it was proposed to leave for the present, the Pakistan Government considered that the following industries should be owned and operated by the State:

Arms and munitions of war.

Generation of hydro-electric power.

Manufacture of railway wagons, telephones, telegraph and wireless apparatus.

The Statement also reserved the Government's right to take over or participate in any other industry vital to the economic well being of Pakistan or to its security and to enter any industry of national importance if the private capital for its development was not forthcoming.

The statement welcomed the participation of foreign capital but provided that in any new manufacturing enterprises Pakistan capital should ordinarily be allowed to subscribe upto 51 p.c. in 13 industries regarded as essential, listed in the Statement, and upto 30 p.c. in all other industries. It added that should the government be satisfied that enough indigenous capital was not forthcoming, foreign investors might be allowed to subscribe the balance. An assurance was also given regarding the remittance of profits.

Radio Pakistan —Three regional broadcasting stations went over to Pakistan when India was partitioned. These three stations are Lahore Station, Peshawar Station and Dacca Station. A new Station has been starten at Karachi in 1948. New transmitters are being installed to make Radio Pakistan more powerful and up-to-date.

Ports —*Karachi* is the principal port of Pakistan and also it is the greatest international air port of the East. It has a fine natural harbour equipped with facilities for loading and unloading cargo and capable of berthing large ships. Port of Karachi is sufficient to handle the entire foreign sea-borne trade of Western Pakistan. It has a big hinterland, such as West Punjab, Afghanistan, N.-W. F. Province. The principal exports are wheat, cotton, oil seeds, wool, skins and hides, rice, animal bones. The principal imports are cotton textiles, sugar, woollen piecegoods, iron and steel, coal. chemicals etc.

Chittagong—Is situated about 10 miles from the sea on the mouth of Karnafuli river in East Bengal. It is the chief port of East Pakistan. It handles over a million tons per year of exports and imports, but plans already have been developed to enlarge its capacity to 3 million tons. But handling capacity of Chittagong is not yet sufficient to cope with the entire overseas trade of Eastern Pakistan. The export trade consists chiefly of tea, jute, wax, cotton, rice, paddy spices, tobacco, etc. The import trade consists of salt, iron and steel, cotton piecegoods, machinery, hardwares, chemicals, drugs, oils, poultry.

Chalana—A new port has been opened in 1950 at Chalana, near Khulna in Eastern Pakistan which will greatly relieve the congestion at the port of Chittagong.

FIRST CENSUS OF PAKISTAN 1951

[Provisional Table—000 persons]

	Total	*Males*	*Females*	*Mirjahirs*
Pakistan	7,56,87	4,00,89	3,55,98	71,50
East Bengal	4,21,19	2,20,57	2,00,62	7,01
Punjab	1,88,14	1,00,41	87,73	48,82
Bhawalpur State	18,20	9.88	8,32	3,71
N.W.F.P. (Settled Districts) ..	32,39	17,15	15,24	51
N.W.F.P. (Tribal Areas) ..	24,60	12,91	11,66	..
Sind	46,19	25,31	20,88	5,61

Khairpur State	3,20	1,77	1,43	11
Baluchistan	6,22	3,50	2,72	29
Baluchistan States	5,56	2,96	2,60	1
Karachi	11,18	6,40	4,78	5,43

AREA & DENSITY

	Sq. miles	*Total persons* (000)	*Persons* per sq. m.
Pakistan	365,907	7,56,87	206·9
East Bengal	54,501	4,21,19	772·8
Punjab	62,987	1,88,14	298·7
Bhawalpur State	15,918	18,20	114·3
N.W.F.P. Settled Districts)	13,815	32,39	234·5
N.W.F.P. (Tribal Areas)	27,242	24,60	90·3
Sind	50,443	46,19	91·6
Khairpur	6,050	3,20	52·9
Baluchistan	52,900	6,22	11·8
Baluchistan States	81,239	5,56	6·8
Karachi	812	11,18	1376·9

LITERACY

(000 Persons)

	No. of literates	*P.c. of total Pop.*
Pakistan	1,03,74	13·8
East Bengal	71,08	16·9
Punjab	19,28	10·2
Bhawalpur	1,10	6·0
N.W.F.P. (Settled Districts)	2,51	7·8
N.W.F.P. (Tribal Areas)	33	1·3
Sind	5,02	10·8
Khairpur	28	8·8
Baluchistan	51	8·2
Baluchistan States	12	2·2
Karachi	3,51	31·3

GOVERNMENT OF PAKISTAN

Governor-General—H. E. Mr. Ghulam Mohammad.

CENTRAL CABINET

The Hon. Khwaja Nazimuddin—*Prime Minister* (Defence).

The Hon. Mr. Mohd. Zafrulla Khan *Foreign Affairs.*

The Hon. Sardar Abdur Rab Nistar—*Industries.*

The Hon. Mr. Fazlur Rahman—*Commerce, Education & Economic Affairs.*

The Hon. Mr. Mohammad Ali—*Finance.*

The Hon. Pirzada Abdus Sattar—*Food, Agriculture & Law.*

The Hon. Mr. M. A. Gurmani—*Interior, States & Frontier Regions.*

The Hon. Sardar Bahadur Khan—*Communications.*

The Hon. Dr. M. A. Mallik—*Health & Works and Labour.*
The Hon. Dr. Mahmud Hussain—*Kashmir Affairs, and Foreign Affairs & Commonwealth.*
The Hon. I. H. Qureshi—*Information & Broadcasting and Refugees & Rehabilitation.*
The Hon. Mr. Azizuddin Ahmed—*Minister of State for minorities.*

Army

Commander-in-Chief—Gen. Mohd. Ayub Khan.
Chief of the Staff—Lt.-Gen. Nazir Ali Khan.
Qr.-Master General—Maj. Gen. Jamaldar.
Chief of the General Staff—Maj.-Gen. Yusuf Khan.
Adjutant-General—Maj.-Gen. Sher Ali Khan.
Master General of Ordnance—Maj.-Gen. Shahid Hamid.

Royal Pakistan Air Force

Commander-in-Chief—Air Vice-Marshal L. W. Cannon.

Royal Pakistan Navy

Commander-in-Chief and Chief of the General Staff—Rear Admiral J. W. Joffard.

EAST BENGAL

Governor—H. E. Malik Firoz Khan Noon.

Ministers

Mr. Nurul Amin—*Prime Minister.*
Mr. Mhd. Habibulla Chaudhury.
Syed Mohammad Afzal.
Mr. Hassan Ali.
Mr. Abdul Hamid.
Mr. D. N. Barori.
Mr. Mofizuddin Ahmad
Mr. Hamiduddin Ahmed.

NORTH-WEST FRONTIER PROVINCE

Governor—Khwaja Sahabuddin.

Ministers

Khan Abdul Qayyum Khan—*Prime* Minister.
Mian Jaffar Shah.
Mr. Khan Jalaluddin Khan.
Mr. M. R. Kiyani.
Khan Mohd. Ayub Khan.

PUNJAB

Governor—H. E. I. I. Chundrigar.

Ministers

Mian Mumtaz Mohd. Khan Daultana—*Prime Minister.*
Sufi Abdul Hamid Khan.
Sardar Abdul Hamid Khan Dasti.
Chaudhury Mohd. Hussain Chatta.
Sardar Mohd. Khan Leghari.
Sheik Fazal Illahi.
Syed Ali Hussain Gardezi.

SIND

Governor—H. E. Mr. Din Mohammad.
(*And a Caretaker Government*)

Bahawalpur—Maj.-Gen. H. H. Al-Haj Dr. Sir Sidiq Mohd. Khan Abasi—Ruler.
Kalat State—Maj. H. E. Belgar Begi Mir Sir Ahmad Yar Khan of Kalat—*Ruler.*
Chitral State—Lt.-Col. H. H. Haji Mohammed Muzaffar-Mulk the Mehtar of Chitral—*Ruler.*
Baluchistan—Mian Aminuddin—*Agent to the Governor-General.*

INDIAN POLITICS

I. GENERAL REVIEW

India's fourth year of independence opened dramatically with a major earthquake in Assam. It was marked throughout by economic difficulties. Bihar and to a less degree Madras, were faced with famine. Developments on the country's borders were disturbing. But although frustration continued and deepened, especially among the middle class, political tempers rose as the first general election on adult franchise approached; and the election may prove a turning point in the course of Indian politics. By the end of the year the international outlook for India became slightly hopeful with a change of emphasis in Anglo-Indian relationship. The report of the Planning Commission was published and it evoked interests all over the country. It became the sheet anchor of the Congress ideals in the general election.

The census was an important undertaking, successfully carried out. It showed that India's population is nearly 357 million.

Relations with foreign powers have on the whole been good. The chief exceptions are Pakistan and South Africa, though Ceylon's policy towards her Indian minority has caused some anxiety. Disturbances in Nepal, in which country India is vitally interested, were followed by a compromise at the instance of India, and the King, who fled from Katmandu to Delhi in November, 1950, was restored as a constitutional monarch, and, through the medium of a coalition, the former oligarchy was tempered with democracy. Invasion of Tibet by communists raised another border problem of dubious import. Relations with China, for a time somewhat strained, appear however, so far to have little serious damage. The Peking Government has since September, 1951, been represented in India by an ambassador.

India's attitude towards Korea (where an Indian ambulance unit has won golden opinions) did not increase her popularity in the USA. But her warning about the consequences of crossing the 38th Parallel was abundantly justified when General MacArthur's forces approached the Yalu. To be correct is not always to be popular and so when the question of a gift or loan of two million tons of food to India came up for consideration, some in the USA put forward the argument of her unfriendliness towards US policies to discourage it; but ultimately a wheat loan was granted to India by the USA.

Several treaties of friendship were signed during the year and numerous trade pacts. The former include agreements with Burma and Persia, to which latter country Indian good offices were tendered at the height of the oil dispute. Mr. Nehru attended the Commonwealth Prime Ministers' Conference in January 1951 and various ministers paid visits abroad, usually to attend international conferences.

At home, the political scene was enlivened by the creation of innumerable new parties, some from within the Congress, others outside. In September 1950 Purushottamdas Tandon was elected President of the Indian National Congress. Though at the annual session of the party at Nasik, resolutions were passed which seemed to emphasise unity and backing for Sri Nehru, the appearance proved superficial later and during the session itself, Acharyya Kripalini, Sri Tandon's narrowly defeated rival, formed a democratic group. Interest then turned to the appointment of the Working Committee, which was considerably delayed. When formed, it was not to the liking of Messrs. Kripalini and Kidwai, and it gradually became obvious that if they did not succeed in getting it reconstituted, they and their followers and associates would leave the Congress.

Democratic Front:—With the death in December, 1950 of Sardar Patel, the Congress organisation was greatly shaken. Already some in the States had formed parties of their own; but now a breakaway on a national scale impended. Pandit Nehru persuaded the organisers of the Democratic Front to dissolve it as a move towards unity. They agreed; but not getting what they considered a suitable response, they then began to leave the party. Acharyya Kripalini and others resigned in May 1951. In June they formed a new party under the name of Kisan Majdoor Praja Party at a convention at Patna. Mr. Kidwai delayed his resignation till after the AICC meeting at Bangalore in July. Finally however, he too left, at the same time resigning his Ministership of Communications, but he rejoined the Congress party again sometime in September.

Congress Manifesto—At its Bangalore meeting, the AICC adopted a political manifesto. It is a sober document unlikely to arouse much popular enthusiasm, and perhaps may be regarded as an annexe to the Planning Commission draft. The manifesto envisaged to work through a mixed economy, and if possible with general co-operation, to achieve the targets, which the Planning Commission has provisionally laid down.

Other parties, new and old, were busy too. Groups were formed with the elections in view. How successful these may be in suitable conditions was shown in West Bengal, notably at the municipal elections in Chandernagore and Howrah. The communists who turned to more constitutional courses during the year—though still engaged in terrorist crime in Telangana and to less extent in North East India—took part in these alliances.

Among entirely new parties, Dr. S. P. Mukherjee's People's Party seemed most interesting. Having himself constituted virtually a one-man Opposition during the long February-June session of Parliament, especially in relation to the much criticised Bill to amend the Constitution, he founded what seemed at first essentially a West Bengal Party; but by August it had already attracted interest in both the Punjab and Bombay and now it is a full-fledged political party on all India basis.

Political bickering continued in the States. Nowhere was political confusion more complete or politics more discredited than in the Punjab, where even the census returns were invalidated for political and communal reasons, and the year ended with Governor's rule installed for the first time in any State since the coming of independence.

For West Bengal, the year was less troubled than its predecessor, though a new influx of refugees began in June 1951. Food was scarce and dear, and procurement led to incidents and disturbances in some places. In April police fired on hunger marchers in Cooch Behar killing some persons. Public protest was widespread and a judicial enquiry was in progress as the year ended.

In Behar, a severe drought led to food scarcity, which became acute before the Centre was fully apprised of the situation. When its extent became known, it was at once promoted to the nation's Number One problem. Thanks to the large contribution from abroad, the situation in Behar seemed much improved by the close of the year.

Of non-political events elsewhere in Part A States, mention may be made of the fuss in Bombay over the Prohibition Act and the dispute in Madras over the legality of what is called the Communal G.O. (Government Order). Both disputes went to the courts. But whereas in the matter of prohibition, the Supreme Court decided largely in favour of the State's contentions, the Madras dispute was eventually covered by an amendment to the Constitution. This was included in the Act which validated certain legislation for the abolition of the zamindaries and introduced certain hotly criticised restrictions on freedom of speech and expression.

Part B States—In part B States there were demands that their status be assimilated to that of Part A. The leading events in these States were the change of Ministry in Rajasthan, the formation of a Ministry for PEPSU and the growing split between Travancore and Cochin. Presidential recognition was withdrawn from Maharaja Sir Pratap Singh of Baroda. At the close of the year, measures were announced for giving "the largest practicable measure of autonomy and responsible government" to the Part C States.

Throughout the year the most important development that occupied the minds of all was the food crisis. Large quantities of foodgrains were bought from abroad and rations were cut throughout the country, but much still turned on the fate of India's request for a food loan from the USA. After somewhat protracted debates, the American Congress sanctioned the loan and the first shipment arrived by the close of the year.

After food, the cloth supply position was, as for several years past, the Administration's chief problem. Towards the end of the year, supplies somewhat improved. Prices continued to rise partly owing to the international situation and partly because of policies adopted in respect of such imporatnt commodities, as cotton, jute and sugar and the high costs of food imports, some of which were passed on to the consumer. However in June, 1951, the Finance Minister expressed the view that prices could be and were being held.

Little progress was made with housing, except in some refugee colonies. It is notable that the Congress manifesto, which in general is modest about governmental achievements, expressed satisfaction over the progress made with the rehabilitation of refugees. Unfortunately, in June a fresh influx began into West Bengal, and by August 15, the incoming refugees became of unmanageable dimensions.

Kashmir—During most of the year, Indo-Pakistani relations were strained. Besides the trade pact, which involved recognition by India of the exchange value of the Pakistan rupee, agreement was reached on some minor matters. Throughout the year however Kashmir loomed up as a large and seemingly insuperable obstacle to friendship. The UNO continued its efforts. In September, Sir Owen Dixon, the Australian mediator left India confessing failure. In June Dr. Frank Graham, the American arrived. In Mid-July, when Mr. Liaquat Ali Khan accused India of moving troops close to the Pakistan border, tension became acute.

Other important unsolved joint problems included immovable refugee property and the sharing of Punjab water. Owing to the permit system, travel between India and Western Pakistan continued to be difficult. The Delhi Pact however worked reasonably satisfactorily up to June, when the number of Hindus leaving East Bengal again began to exceed that arriving.

Production—Towards the end of the year industrial production could be described as not unsatisfactory, though some leading industries, notably jute, cotton and sugar had for various periods been hampered by scarcity of raw material. The Bombay mill industry was dislocated for two months by a prolonged strike. In the first year of devaluation, India's balance of trade was so favourable, not so much due to devaluation but mainly for the stockpiling by Britain and America following the developments in the Korean War. By the end of the financial year, the favourable balance was Rs. 21 crores compared with an adverse balance of Rs. 71 crores in 1949-50. Trade with Pakistan began to flow again when a trade agreement was signed in February. The Industries Control Bill and the Permanent Tariff Commission Bill were passed and put into force.

Development schemes drawn up by the States were further cut during the year. Progress was however made with some of the leading multipurpose and irrigation projects, which will, when complete, cost Rs. 1900 crores. An important stage in West Bengal's Mayurakshi Project was completed. The ambitious Kosi project continued to be a subject of controversy.

In November 1950, details were published of the Colombo Plan for Co-operative Economic Development. In July 1951, India's own draft economic plan was published. Both are ambitious. Some of the benefits under the Colombo Plan will take the form of educational facilities abroad. At home, the fourth year of independence, like its predecessors, was a lean year for education. Its main features were the raising of Visvabharati to university status and the passing of the Calcutta University Bill.

II. INDIA'S NEED FOR AN OPPOSITION

India today needs most a healthy opposition to step into the shoes of the Congress party which is in a process of disintegration. The political loyalty is now in a process of transfer to other progressive parties and blocs, however small their beginnings might be. Indian politics today illustrate two old commonplaces of British constitutional thought—that coalitions do not work once the emergency which created them is over, and that effective Parliamentary democracy requires a loyal opposition as an alternative to the Government. The Congress party prior to assumption of power was not a party but a platform where all the political parties met and assembled and fought for liberation of the country. The Congress Party out of office was a national movement with an aim, not a party with a doctrine. Only independence mattered in pre-independence days, and on that there was no division.

Unity continued for a long time, even after August 15, 1947. The succession of crisis which faced free India demanded action, not argument. Law and Order had to be restored after the Punjab massacres, the States had to be integrated, Kashmir had to be protected from the tribesmen and the threat of Hyderabad's would be independence had to be dealt with.

The emergencies have been dealt with masterfully. Now Congress is left face to face with India's perennial problem of poverty, a poverty which for fifty years has been getting slowly, if intermittently, worse. The next issue has thus become economic, and the many divergencies of economic belief within the Congress Party have inevitably come to the surface. Each Congress wing thinks that it alone possesses the cure-all. India goes on getting poorer while Congress tries to agree on a remedy. Meanwhile the left hand undoes what the right hand has accomplished; in 1948 controls were lifted and put back within a few months. Talk of nationalisation frightens the investor; lack of it in fact frustrates the Left. The economy stagnates, for there is no planning, and yet enterprise is not free.

Faction without Merit—Inevitably the electorate grumbles and Congress descends into faction—faction totally without merit. Each group claims alone to represent the Congress gospel in its purity until the bewildered elector cannot discover who stands where. No real rival party emerges, but the glory of Congress is blurred. Most of India's State Congress parties are today torn by power politics. In Rajasthan, Chief Minister lost his position to a competitor he had just unsuccessfully put him before a tribunal for corruption. In the Uttar Pradesh, a campaign of 60 members of the Assembly against the Food Minister for alleged corruption and favouritism ended in the expulsion of 19 from the party. In the East Punjab, the Cabinets have assumed a French impermanency. In Andhra a purely personal row became so bitter that bogus Congressmen were enrolled by tens of thousands. The monolith is beginning to dissolve, but no working opposition has yet solidified.

Certainly it will not come from the present opposition parties, much less of unseating Congress completely. The RSSS (Rashtra-Sewaka-Sevak Sangh) stands for a Hinduism without caste or idols and wants to remain a cultural non-political body. The Mahasabha has neither organisation nor purpose. Its following is confined to Bengal, where its erstwhile leader, Dr. S. P. Mukherjee, missed the boat in March 1950. The Socialists have a purpose and a leader of all-India fame in J. P. Narain, but neither real organisation nor following. The Communists have no lasting leader because of Russia's purge mania; their organisation is localised to a few pockets which are retracting, their following is patchy and marred by memories of collaboration in the war effort when Congress was in jail, and their immediate purpose shifts as Moscow absorbs lessons of doubtful application from Tito or Mao. Of the local parties, the Workers and Peasants Party is more Cominformist than the Cominform and may win some seats in Maharashtra on an anti-Brahmin plank. The Revolutionary Communist Party has committed some sordid but tiresome murders, mainly in Assam and most of its leaders are now in jail. The People's Congress in the UP, which might have been a major breakaway was stillborn. None of these parties can hope to win in elections large number of seats.

A real opposition can only develop when the Congress splits itself into a Right and a Left. And that happened inevitably when Kripalini formed the Krishak-Praja Majdoor Party. Since the defeat of Mr. Kripalini in the Congress Presidential election, the split in the Congress became more than evident and difference between different groups continued to be hardened, ultimately resulting in the formation of new parties outside the Congress. Of course Nehru on his part tried his best to stop any breakaway in the Congress.

At the Ahmedabad meeting of the Congress Working Committee held in the last week of January 1951, a "Unity Resolution" was passed unanimously calling upon all the dissindents to unite under the banner of the Congress. Pandit Nehru at that time observed that the spirit of the Congress was fading away at a rapid pace. "We have today, in the ultimate analysis, to fight for the soul of the Congress. We are looking too much after the body. Although the body is not nearly as good to look at as it was, the body may continue possibly; but if the spirit goes from it, then even the body does not last long. And I find the spirit of the Congress is fading away at rather a rapid pace", remarked Sri Nehru.

The unity appeal had little effect on the Kripalini group which was still inside the Congress under the name of the Democratic Front. The Front believed in the basic principles and policies of the Congress. Its aims and purposes included certain items and ideas of the Congress for which it endeavoured to work. Its aims were laid by Sri Kripalini as follows: "(1) Implementation of the aims and objects of the Congress, (2) the carrying out of the constructive programme, (3) working for purity of public life, and (4) the restoration of democracy in the Congress organisation, specially the freedom of vote. No disciplinary action was taken against Kripalini as his objectives represented the true and good ideals of the Congress.

The development of Indian affairs presents a picture of varied interests. The main interest is the disintegration of the Congress party which was the embodiment of the nation's struggle for independence and which was placed in effice to build up the independent existence of India to a state of prosperity and happiness. The problem is that, there is no other stable all India political party to step into the shoes of the premier national organisation. Virtually, Indian democracy has been the rule of one party without a strong opposition, since the attainment of independence. Mahatma Gandhi held that the Congress party should be disbanded after independence as that would help the growth of healthy parliamentary parties to run the administration of the country. But that has not been materialised and the national Congress still stays as the largest majority party in the country which is in charge of the administration of the central as well as the States governments.

III. CRISIS IN RAJASTHAN

The Rajasthan Cabinet of Pandit Hiralal Shastri submitted the resignation of the Cabinet to the Rajpramukh on January 5, 1951. An interim Ministry was sworn in later on that day. Since Ministry's very inception, it was a subject of controversy in the Rajasthan Congress and never enjoyed its confidence or support.

It came into office on March 30, 1949, and shortly thereafter the RPCC passed a vote of no-confidence in the Chief Minister. In a trial of strength in Congress elections in 1951, Pandit Shastri's supporters won only about a dozen seats out of 133 in the RPCC and a majority of the Ministers suffered a defeat. There being no legislature in Rajasthan, the Congress elections were regarded as an indication of public support to the Ministry, the result of which could not be ignored. The Ministry's fate had therefore been in the balance since August, 1950. Pandit Shastri however lost a fine opportunity of forming a composite ministry of both Congress groups when after creating a favourable impression by submitting a letter of resignation to the President of the RPCC he resiled from that position. This added to the bitterness between the two groups. Lately he refused to withdraw cases launched against Mr. Vyas and two other former Ministers of Jodhpur. The cases will now be withdrawn by the new Ministry, after which it is expected Mr. Vyas would come into power and the interim official Ministry would come to an end.

IV. AHMEDABAD SESSION OF A.I.C.C.

At its Ahmedabad session, the AICC accepted reintroduction of paid primary membership of the Congress, which was dropped in April, 1948, and fixed Re. 1 as the annual fee, as against the former fee of four annas.

The AICC accepted the object of the Congress as the establishment in India, by peaceful and legitimate means, of a co-operative commonwealth based on equality of opportunity, political and economic and social rights and aiming at world peace and fellowship.

The minimum age limit for primary membership was laid down as 18 years and for active members 21 years. It was agreed that an active member should be habitual wearer of handspun Khadi and hand woven Khadi. He should be a teetotaller; he should not observe or recognise untouchability in any shape or form; he should believe in equality of opportunity and status for all, irrespective of race, caste, creed or sex; and should be a believer in inter-communal unity and have respects for the faiths of others. He should regularly devote a part of his time to some form of national, community or social service, otherwise than for personal profit, or to some constructive activity, as laid down from time to time by the Congress. He should not be a member of any political party, communal or other, which had a separate membership, constitution and programme.

Unity Resolution passed by the AICC—The AICC passed the Unity Resolution calling upon all congressmen to close their ranks and sink their differences. Pandit Nehru warned that unless group rivalries were removed, the Congress would go down hill and never recover the position it had held in the country's political life. He declared, "We are facing an acid test—not that of the election which is a small matter—but from the point of view of existing as an organisation for action." The Congress had become lifeless and many of its members regarded it merely as electioneering machinery. This the Congress had never been. Now however, not only were they inert, but they did not even think of action. This was a dangerous state of action.

In the past, pointed out Pandit Nehru, there had been differences of opinion within the Congress, but the task of achieving independence had called for and secured harmonious working. But now that freedom was won, there was no common aim. Therefore they must be clear about their objectives. Recalling in this connection Mahatma Gandhi's advice to dissolve the Congress as a political body, he said that perhaps, in rejecting that course, they had acted shortsightedly. If the Congress could not be revitalised, they would have to end it or it would die itself.

Acharyya Kripalani's speech—Sri Kripalani said that under the present set up of the Congress, differences were inevitable. So long as independence was not achieved, there was unity in the country. Under a united leadership, all classes of people rallied to fight a foreign tyranny. The socialists who only wanted to broaden the economic basis of society, were also in the Congress and fought with the rest. Once freedom was won, then differences became pronounced. There had been a drift in the country both on the political and economic plane. The primary needs of the people had not been satisfied to the extent to which it was possible. If you insist on the *status quo,* you will be destroying the country. Moderates who stood for the *status quo* gave way to Gandhiji's revolutionary programme. We have been revolutionary in our times. We must have a progressive and radical outlook and not give way to reaction or even the *status quo*. He denied the charge of indiscipline made against him. He said, "I was the longest friend with Gandhiji, from 1907 to 1948. I was not a leader but a soldier. Nothing has been more painful to me than that I had been separated from Sardar Patel in the last days of his life. It is a tragedy that I have not been able to see eye to eye with him. But you must remember that the country is a hard task master. Those who have given the best of their lives to the country, cannot think on personal lines."

The Birth of the KPM and Patna Convention—The Congress Working Committee in its Delhi Session held in the first week of April, 1951, adopted a resolution recording its disapproval of the formation of separate parties within the Congress. "No separate parties can be formed within the Congress and Congressmen must not condemn or criticise policies which have been adopted by the Congress, or by Congress Governments, except in Party or Committee meetings." Needless to point out that this resolution was mainly directed towards the Democratic Front of Kripalini. The Front criticised this Delhi resolution as "violation of the spirit of the Unity resolution passed by the Ahmedabad session of the AICC. It is wrong to say that any serious effort was made by the Congress High Command to bring about unity. No conscientious Congressmen would be able to fulfil the conditions laid down in the said resolution."

This rift gradually widened until in the Patna Convention held in June 15, the Krishak Praja Majdoor Party was formally started. Prior to that, in response to Pandit Nehru's appeal again for unity, Kripalini, the leader of the 'splinter group' in the Congress and Mr. Rafi Ahmed Kidwai, the elusive man, made a representation to Nehru stating that the minority groups could not exist within the Congress without completely subordinating themselves to the majority group. They therefore felt that they could not have any place in the Congress Organisation under the the then existing circumstances. The unity talks conducted by Sri Jawaharlal Nehru and the Congress President with the Democratic Front leaders in Delhi in the first week of May produced no result. Sri Kripalini, demanded among other things, that the minority groups should be given proportional representation in the Congress executives and the office-bearers should be so chosen that they command the confidence of th minorities also. Although however no unity was achieved during the Delhi talks, the Democratic Front was dissolved in response to the leaders' wishes, particularly of Panditji and Maulana Azad's. The Front resolved on 3rd May that "in deference to the wishes of the Working Committee and particlularly of Sri Jawaharlal Nehru and Maulana Azad, it would be dissolved."

The unity move failed to make any headway in the AICC session held in Delhi on 5th May, 1951. The AICC called its next meeting in Bangalore as a last effort to end differences.

Meanwhile, the Krishak Majdoor Praja Party was inaugurated in the Patna Convention held there on 15th June. The formation of the Praja Party concluded a virtual withdrawal from the Congress and the Party abandoned all proposals to retain an association with the Congress. Acharyya Kripalini sent a letter of resignation to the Congress President which was accepted by him. The new Party was practically the enlargement of the Krishak Majdoor Praja Party formed by Dr. Ghosh in 1950.

The objective of the party was defined as the "establishment of a free democratic, casteless and classless society by peaceful means." Its primary membership is open to any person of the age of 18 and over on payment of a fee of four annas a year. On the question of nationalisation, the party was conservative. It observed: "While some defence and key industries must be nationalised, we do not believe in the necessity of the Government directly undertaking and conducting all industrial enterprises." "Wholesale nationalisation of industry would ultimately lead to state capitalism inimical to democracy. Therefore an increasing sector of centralised industries, instead of being in private hands, should be owned by society and run by autonomous corporations or by co-operatives representative of various interests, including the state."

Emphasising the importance of distribution of wealth, the manifesto says: It is necessary to prescribe for all practical purposes, the minimum and maximum emoluments that a worker in any field of social activity can enjoy. Our aim will be to see that no worker in any walk of life gets more than 20 times the emoluments or the standard wage a labourer gets in the field or in the factory. The minimum wage must be high to enable the worker and his family to live a healthy, happy and decent life. In the field of foreign policy, strict neutrality is advocated. "We must restrain the quixotic impulse to save the world."

V. BANGALORE SESSION OF THE AICC

The Bangalore session of the AICC, held in the second week of July, adopted a resolution inviting all the dissidents. It welcomed to the Congress Party "all those who wish to co-operate in the great task ahead" including those who have seceded. The resolution further assured that "care should be taken that the choice of suitable candidates is not affected by the predominance of any group or clique in any area. While disapproving the formation of groups, the resolution urged "prompt and impartial investigation of charges of irregularity where they appear to have some *prima facie* justification.

The resolution, failed to bring the desired result as the Krishak Majdoor Praja Party did not respond.

Mr. Kidwai, the prominent Congress leader and a life-long friend of Nehru, held a very curious position inside the Congress during these dramatic days of Congress disintegration. His sympathies were openly given in favour of the Krishak Majdoor Praja Party and it was taken for granted that he would join that party. Failing to secure from the Bangalore session any of the major advantages which he mentioned as his minimum conditions for remaining in the Congress, Mr. Kidwai left the Central Cabinet and also the Congress sometime after. He then joined the KMP party of Kripalini. But his association with that party was also short lived as he left that party and rejoined the Congress after assumption of the presidential reins by Pandit Nehru following the resignation of Tandon.

At its Bangalore session, the AICC adopted the Election Manifesto. Drafted by Sri Nehru, it stressed the need to follow Gandhiji's teachings, to value the moral and ethical basis of national life and make that the condition of political action. The manifesto promises land reforms, prevention of the fragmentation of the holdings, co-operative farming and preference to agricultural labour in the allocation of newly reclaimed lands. It reiterates the Government policy of a mixed economy—controlled distribution in regard to commodities which are in short supply, and maintenance of a fair and proper structure of relative prices as between agricultural commodities *inter se* and between them and manufactured articles."

A new feature in the manifesto is that it is proposed to make a planned effort to canalise the unused time, skill and other resources of the people on a voluntary basis for the economic and social betterment of the community.

Since the formation of the KMP, the Congress was faced with a problem of fast disintegration. Dr. Shyamaprasad Mukherjee formed a new party, the People's Party. There was a spate of resignation from the Congress on an epidemic basis. Dramatic events moved speedily. The Constitution Amendment Bill was passed rousing country wide consternation and opposition. It was pressed through the legislature by sheer weight of official majority. The Press Bill was another controversial measure and it also raised a volume of opposition as it was held to be the negation of freedom of the press. The Hindu Code Bill was another controversial piece of legislation which had to be abandoned owing to the overwhelming opposition inside and outside the legislature. Although Pandit Nehru affirmed that his party would stand or fall with the fate of the Hindu Code Bill and the Congress party in the legislature would force the bill through legislation, come what may, but still the party in power had to retrace its steps. The Congress had at last decided not to proceed with the Bill further. After passing only four clause of the Bill, it was abandoned. And that was the parting of the ways between Dr. Ambedkar and the Congress Party. It was strange how Dr. Ahmedkar, who all through his life was the arch opposition of the Congress, could join hands with them and come into their fold as a faithful follower. Immediately after the abandonment of the Bill, he resigned, accusing the Congress Party for laying him down and betraying the Hindu Code Bill which was hailed by him as the foundation of a new Hindu society.

Taking advantage of the situation, the socialists tried to make the situation worse for the Congress. Their main attempt in this direction was to stage a railway strike on an all India basis. They manouvred the strike well in its initial stages, but when it was ripe for action, they, as usual, fumbled and missed the goal. In consequence the strike did not take place and the party lost much in public estimation.

In these backgrounds, Pandit Jawaharlal Nehru realised that the stock of the Congress was fast deteriorating in the eyes of the public and something must be done to revitalise and reorganise the Congress with revolutionary dynamism. Sri Tandon with all his good wishes, sacrifices and saintly character, was considered as one who glorifies the age that is bygone. Simply speaking, Tandonji was held as the representative of the conservative section of the Congress. He is very firm in his own principles and he cares more the virtues rather than the soul. His firm attitude towards Acharyya Kripalini and also Kidwai precipitated a crisis in the Congress leadership. Tandonji took a strong attitude that so long as Mr. Kidwai was a member of the Congress party and also of the Cabinet he could not criticise the Congress or the Government. That was simply a just and proper attitude. But that hastened the crisis, although of course, it was not the only cause. To the surprise, or rather bewilderment of the whole country, Sri Jawaharlal resigned from the Congress Working Committee.

VI. CRISIS IN THE CONGRESS

The unity of the ruling party being of supreme importance to ensure success in the coming election, the crisis precipitated by the resignation of the Prime Minister from the Congress Working Committee had to be tided over. Various plans to compose the differences between the elected President of the Congress and the Head of the Government were canvassed but without success. The crux of the crisis is the question of the position of political parties in the State: of the relation between the majority party and the Government. A clear answer to this fundamental question was implied in the traditional claim of the Congress that it represents the nation.

In pre-independence days, the claim that the Congress represented the entire nation could be maintained with a degree of plausibility. But now it logically creates a situation incompatible with parliamentary democracy. The corollary to it was the contention that the Congress in session was the Parliament of the nation. The contention was implicit in the word Congress, which was preferred to the term party. If one party claims to represent the whole nation, and the claim is constitutionally conceded, as was done when the British Viceroy transferred power to the Congress, the existence of other parties was ruled out logically. The Congress tradition seems to lead itself to a totalitarian basis of the state. The State being composed of the Government, the Congress and the people, the Government must be responsible to the Congress and controlled by it, because it commands the confidence of the people. Evidently this picture of the things made no room for a parliament as provided for in the new Constitution. Yet, the Congress is also committed to the parliamentary democratic practice. The last conflict between the Congress President and Prime Minister resulted from this contradiction between its cherished tradition and the present position. How to reconcile a totalitarian theory of State and democratic practice? That is the problem which confronted the Congress leaders, particularly the Prime Minister.

The Nehru-Tandon deadlock continued for a considerable time and no settlement could be reached.

In course of his letter dated 9th August, 1951, to Sri Tandon, Pandit Jawaharlal remarked: "The Congress is rapidly drifting away from its moorings and more and more the wrong kind of people, or rather people who have the wrong kind of ideas, are gaining influence in it. The public appeal of the Congress is getting less and less. It may and probably will win elections. But in the process, it may also lose its soul. Because of all this, I thought hard as to what I should do. I could not conceive myself to be a willing party to this gradual decay or even a passive or enert spectator of it. Naturally, I did not wish do anything which itself would injure the Congress. That was the problem before me not only now but for months past. Ultimately, I came to the conclusion that I could serve the real objectives and ideals of the Congress better by remaining outside the Working Committee."

With much regrets and painful realisations, Sri Tandon agreed to resign the Congress Presidentship at the Delhi session of the AICC on 8th September, 1951. In his letter to Sri Nehru dated August 9, the Congress President wrote in the last paragraph: "If to keep you in the Working Committee, it is necessary or desirable that I should resign the Presidentship of the Congress, I am ready to do so with great pleasure and goodwill." At the time of resignation, Tandon remarked that Sri Nehru's demand for a reconstitution of the Working Committee was "neither constitutional not proper," and had resulted in a situation which was "definitely detrimental to the interests of the Congress." Sri Tandon's resignation was accepted by the AICC and Pandit Nehru was elected President of the Congress.

Although Sri Nehru assumed the Congress Presidentship, to give a shock treatment to the organisation, yet the common people were bewildered at the Nehru-Tandon conflict and nothing better view prevailed amongst the people that by this change of leadership anything spectacular would be the outcome.

Some sections of the public raised the question whether it was proper for the Prime Minister to merge the two offices, that is, the Prime Ministership and the Presidentship of the Congress. Because in a democracy the common practice is that the head of the party in power should not also be the head of the government. The head of the government is the head of the parliamentary section of the party, and not of the entire organisation. However Pandit Nehru observed that it was a most critical time for the Congress and there was no occasion for any hesitation for him to undertake also the presidency of the Congress as it is necessary for giving a shock treatment to the dying and disintegrating Congress to revive and revitalise it.

Following this, the fifty-seventh session of the Indian National Congress was held at Satyawatinagar, Delhi from October 17. The Plenary session adopted five official resolutions on (1) general condolences, (2) amendment to the Congress Constitution, (3) foreign policy, (4) anti-social and disruptive tendencies, and (5) election manifesto and economic programme.

VII. DISSOLUTION OF THE ALL-INDIA STATES PEOPLES' CONFERENCE

The twenty-four year old All-India State Peoples' Conference was dissolved on 19th October at its session held at Satyawatinagar, New Delhi. Delhi.

VIII. DEVELOPMENTS IN THE PUNJAB

For some time Punjab has been the hot bed of internal politics and is torn by internal rivalries. While in most other States there are only two opposing groups of congressmen, in the Punjab (I) there are nearly a dozen factions whose changing combinations afford great scope for ambition and intrigue. Dr. Bhargava was the Chief Minister of the State and Lala Bhimsen Sachar was the former Chief Minister and Pratap Sing Kairon is the President of the State Congress. Somehow or other, Dr. Bhargava fell into disfavour with the High Command of the Congress who were supporting the Kairon-Sachar group against him. The effective strength of the Kairon-Sachar group in the State Assembly consisting of 70 members, was only 20. Dr. Bhargava was a man of strong personality and he did not take orders from the outside regarding the formation of his own ministry. The rivalries became so ugly that the Central Parliamentary Board ordered Dr. Bhargava to resign his premiership. But he refused to resign, at first, but subsequently he resigned on 16th June, 1951. The Governor tried to form an alternate ministry with the Kairon-Sachar group, but he failed. The 40 members of the Bhargava group, in a communication to the Congress Parliamentary Board, pointed out that, as a majority group, they held the denial by the Board of their constitutional right to continue in office as unparliamentary. There is a opinion among a section of the people that the States autonomy is still a matter of pleasure of the Central Government and a responsible Ministry enjoying majority in the legislature is liable to be dismissed by the Government in the name of political propriety.

The President of the Indian Union issued a proclamation on 20th June assuming all functions of the Government of the Punjab (I) and all powers vested in or exercised by the Governor of the State. By an order issued simultaneously, the President vested these powers in the Governor of the State.

Dr. Bhargava with his followers subsequently joined the KMP party and sought election to the State Legislature on that party support.

IX. SERIOUS CRISIS IN THE BIHAR CONGRESS

In October 1951, a serious crisis developed in the Bihar Provincial Congress Committee with the resignation of Dr. Srikrishna Sinha, Chief Minister from both the Working Committee of the BPCC and the Congress Election Board. Sri Prajapati Misra, another member of the Working Committee and of the Election Board also resigned. The main cause of this crisis is the difference between the Chief Minister and Dr. Anugraha Narayan Sinha, over the selection of candidates to the legislature. It is learnt that the Chief Minister Dr. Sinha took this drastic step because of the "highly improper and undemocratic method" applied in the matter of selection of Congress candidates by the President of the BPCC. It is stated that the Chief Minister's party had entrusted the President of the BPCC with the work of selecting Congress candidates in good faith thinking that he would proceed with the work irrespective of party considerations. But about 80 per cent of the men selected belonged to the rival group of the Chief Minister and this created widespread resentment among Congressmen in the State. If this list was finally approved by the Centre then Dr. Anugraha Narayan Sinha would definitely become the Chief Minister of Bihar after the General Election. However the crisis was averted and tided over by the intervention of Pandit Jawaharlal Nehru and the rival parties were made to agree to a compromise list.

X. COOCH BEHAR FIRING

On 21st April, there was a great firing in Cooch Behar by the Police on the hunger marchers who led the procession demanding food. The Cooch Behar State has always been a surplus area in paddy production and it continued to be so till the end of 1949. Since the merger of the state with West Bengal there has been a continuous transfer of paddy from the State to the other districts of West Bengal. As a result, the paddy position worsened in the state followed by rising prices of the commodity. The price of paddy soared to more than Rs. 60/- in certain interior parts of the state. The situation of paddy supply further aggravated owing to the influx of the refugees from the East Bengal. A procession of hunger marchers on 19th April, 1951 proceeded to the office of the Deputy Commissioner demanding introduction of rationing of rice. Although some rationing on limited scale was introduced by the D.C., but it did not satisfy the people. And on the next day, a bigger procession of hunger marchers proceeded to the office of the D.C. On demand of full rationing, by the people, the D.C. said that he could not give any assurance unless he gets supply from outside the State, that is, from the Government of West Bengal. Tension gradually mounted over the food crisis in Cooch Behar and on 21st April firing by the police took place causing death to many. The authorities promulgated an order under section 144 prohibiting procession and this precipitated the firing. A girl of 18 was killed by revolver firing by police. Another girl also died of police firing. A boy of 7 was shot dead.

There was severe criticism and protests all over the state of West Bengal, and as a result the Government have ordered a judicial enquiry into the firing. An Enquiry Committee has been set up with Mr. Justice S. N. Guha Roy as the Chairman. While this Year Book is in the press, the enquiry has been conducted and a report is said to have been submitted to the Government.

XI. VINOBHA BHAVE'S "LAND GIFT" MISSION

Vinobha Bhave, well-known disciple of Gandhiji, undertook his "land-gift mission" to secure lands for the landless peasants. He started his mission at the communist-troubled spot, Telengana in Hyderabad, where the Communists committed many violences. Vinobhaji's mission is to establish the peasants on the land, not by violence, but by peaceful means and helped by the landed class. Zamindary abolition by the State is not a cure for the landless peasantry, says he. According to him expropriation by law amounts to expropriation by force and the result would create hatred and enemity among the different classes of the people. He is making an all India tour with a programme of securing five lakh acres of lands for the people. His achievement in this direction is not altogether insignificant. Up till now he has obtained free gift of lands to the extent of about 50,000 acres and even the President of the Indian Union has made a gift of land to him for distribution to the peasants. This is really a unique experience and a novel endeavour to effect redistribution of wealth on a voluntary basis in the society. This programme is in pursuance of the "Sarbodaya plan".

INDO-PAKISTANI RELATIONS

I. GENERAL REVIEW

The Indo-Pakistani relations continued to remain unchanged than what it was during the previous year. The situation did not improve and the main problems that faced these countries are the Kashmir problem, the evacuee property, the exchange system, the permit system and the Indo-Pakistani trade. Kashmir issue forms the main bone of discontent and all other issues are mere subsidiary to that main stumbling block.

At the Commonwealth Prime Ministers' Conference held in the first week of January 1951 in London the Kashmir issue was raised informally without reaching any conclusion. The Pakistan Prime Minister at first refused to join the Conference unless the Kashmir was included in the agenda. But subsequently by special request he participated in the Conference, but the Kashmir issue could not be solved there.

II. CALCUTTA AND DACCA ISSUE OF EVACUEE PROPERTY ORDERS

The West Bengal Governor promulgated on 6th February, 1951, the Evacuee Property Ordinance on the cultivation of agricultural lands and renting of residential houses abandoned by persons who migrated to East Bengal as a result of the communal disturbances in 1950. The East Bengal Government has also promulgated two Ordinances. The first is known as the East Bengal Evacuee Property (Restoration of Possession) Ordinance and the second as the East Bengal Evacuee (Administration of Immoveable) Property Ordinance.

This is in accordance with the Delhi agreement. Because of a difference of opinion between the two Governments, the promulgation of the ordinance was delayed. Ultimately the dispute was settled by the two Central Minority Ministers.

The West Bengal Ordinance prescribes a procedure for the restoration of immoveable property to migrants who return to West Bengal before March 31, 1951. The Ordinance also provides for the sitting up of a committee, with a Government officer as chairman and two members of the minority community, to look after and manage an evacuee property in respect of which the migrant makes a declaration that he has no intention of returning to West Bengal or where the migrant fails to return to West Bengal before March 31, 1951.

The West Bengal Evacuee Property Ordinance came into force with effect from February 6, 1951, and the West Bengal Evacuee Property Act came into force from March 21, 1951. The law under the Act relates to the immoveable property in West Bengal of all evacuees, and the expression "evacuee" means a person ordinarily resident in West Bengal who, on account of communal disturbances or fear of such disturbances, leaves or has, after August 15, 1947, left West Bengal for any place in Pakistan and includes the legal heirs of such persons. The Act replaces the Ordinance. Under the provisions of the Act, the "appointed" day by which an evacuee has to return to West Bengal and apply in writing to get back his property was fixed as March 31, 1951.

As regards immoveable property situated in the urban area, the provisions of the law relating to restoration will be applicable only in the case of these evacuees who migrated from West Bengal to Pakistan on or after January 1, 1950.

Where an evacuee returns to West Bengal and files an application by March 31, 1951, for restoration of his property, but has to wait for some time before his property can be restored to him after completion of such summary enquiry as may be necessary and after eviction of occupiers of his property, the evacuee is entitled to be provided with accomodation by the Government and to monetary help during the time that he remains in a Government shelter waiting for restoration of his property.

III. INDO-PAKISTAN TRADE AGREEMENT

As a result of the talks held with the Pakistan Government by an official delegation, headed by Sri N. R. Pillai, an agreement between the two countries was signed on February 25, 1951.

While the agreement is for the period ending June 1952, in respect of the main commodities, special provision has been made for speedy delivery of urgently needed supplies in both countries. The main commodities that would be supplied by Pakistan would be raw jute, raw cotton and foodgrains while in return India will supply coal, steel, textiles and cement.

In respect of raw jute, Pakistan will grant an export allocation to India of one million bales before the end of June 1951 and a further quantity of 2·5 million bales for the year July 1951 to June 1952. To ensure the supplies stipulated for the next four months, the Pakistan Government have agreed to sell to us at an agreed price the entire stock of about 350,000 bales of raw jute held by the Pakistan Jute Board and to place an overall quantitative limit on the export quotas granted to other countries. In respect of raw cotton, our mills will be free to buy whatever quantities they can, as there are at present no destinational quotas for exports from Pakistan. It is not expected however that more than 100,000 bales would be available during the current season and it is doubtful even if this quantity could be obtained. For the next year also the agreement provides that if the Pakistan Government introduce destinational quotas for the export of raw cotton, they will allocate a quota of not less than 400,000 bales of raw cotton to India from next year's crop. In regard to foodgrains, India is likely to obtain approximately 2,50,000 tons consisting mainly of rice and a small quantity of wheat during 1951. Pakistan has agreed to supply crop permitting 1,50,000 tons of rice and 2,75,000 tons of wheat. From India, 600,000 tons of coal will be supplied to Pakistan before the end of June 1951 and another 1½ million tons between July 1951 and June 1952.

Another feature of the agreement is a list of commodities which would be placed on the Open General Licence, both for imports and exports by the two Governments. In respect of all other commodities, the two Governments have agreed to grant to each other export and import facilities not less favourable than those given to any other country in the sterling or soft currency area.

With the conclusion of a trade agreement, it was necessary to find a mode of payment to facilitate the exchange of commodities and flow of trade between the two countries. The question of the par value of the Pakistani rupee was under the consideration of the International Monetary Fund for a long time without reaching a decision when the agreement was concluded. The Government of India have, in the altered circumstances due to Korean war, agreed that exchange transactions between India and Pakistan should be permitted on the basis of the par value of the Pakistan rupee as declared by the Pakistan Government, that is, 100 Pakistan rupees =144 Indian rupees.

The main provisions of the Agreement are:—

The period of this agreement shall be from the 26th February, 1951 to 30th June, 1952. The two Governments agree to permit the exportation to and the importation from the other country of the commodities and goods specified in the Schedule I, upto the quantity or value mentioned against each item, during the periods indicated in columns 2 and 3 of Schedule I. The two Governments agreed to grant upon application duly made, export or import licences up to the quantitative or monetary limits specified in Schedule I, in accordance with the laws and regulations and administrative practices of the Government granting the licence.

Under this agreement, India shall export to Pakistan—Coal, hard coke, soft coke, pig iron, ferro silicon, ferro manganese, galvanised sheets, black sheets, iron and steel products (rails, wheels, tyres and axles, structural steel, electrical steel sheets), M.G. crossings, mills loose jaws for MG steel sleepers in silico manganese steel, keys for MG steel sleepers, aluminium circles and steets, high alumina fibre brick, soft wood, hard timber (other than teak), cement, stone and ballast, paper, linseed oil, mustard oil, chlorine, rubber tyres and tubes (other than cycle tyres and tubes and giant and non-standard tyres and tubes), handloom cloth, cotton waste, shellac and jute manufactures.

Pakistan shall export to India—raw jute, raw cotton, hides and skins, rice, wheat, gram, gur, mustard oil cake, fruit, vegetables, fish eggs, betel leaf etc.

Indo-Pakistani Permit System—In June, 1951 a conference was held in New Delhi over the grant of permits between Indo-Pakistani travels. The talks were mainly concerned to improve travelling conditions between India and West Pakistan. In pursuance of this talk, travelling facility between the two dominions are now much relaxed.

IV. DELHI TALKS ON FINANCIAL CLAIMS

In May, 1951, the Finance Minister of India negotiated with the Pakistan's Finance Minister for a settlement of financial issues between the two countries. The talks were mostly inconclusive as no decision could be reached on controversial matters like the agreements reached in 1948 relating to sterling balances settlement on account of payment made by HMG to Pakistan, third party claims between the two Bengals, and payment by Pakistan for military stores received from India. The Finance Minister said that it was not possible to reach an overall agreement between the two countries who agreed to adjourn to allow "time for further examination of some of the more important items which involve questions both of fact and interpretation."

V. SITUATION DETERIORATES

By the middle of the year, Indo-Pakistan relations worsened so much, that that there was talk of war among the public, and press and Government of Pakistan. Indian temperament, official and public, showed a degree of remarkable patience and silence during this critical period. Because of war talks in Pakistan, India had to take precaution by posting troops in all strategic points—and this measure was simply defensive.

The Pakistan Prime Minister accused India for large scale concentration of Indian armed forces in East Punjab and in Jammu and Kashmir. But the reason behind such troop concentration was that since the appointment of Dr. Graham as the UN Representative for Kashmir dispute, Pakistan and particularly its late Prime Minister, Mr. Liaquat Ali Khan made exciting speeches raising the temper of the people of Pakistan to a war level. When there were talks of war from the pulpit to the press in Pakistan, at that time India took precaution with all defensive measures.

The Indian Prime Minister in his telegram dated 17th July, 1951, to the Pakistan Prime Minister made the following observations: "Your apprehension that there is any threat to the security of Pakistan and to international peace on the part of India is completely unjustified. India's policy continues to be to preserve and ensure peace and to avoid war. We have demonstrated this by our reduction of the Indian army last year in the hope that this might have some effect on Pakistan. But according to our information, continued and intensive efforts have been made to increase the armed forces of Pakistan which have been largely massed on the Indian frontiers. In addition to this, an intensive and astonishing campaign for Jehad and war against India has been carried on not only by newspapers but by responsible authorities in Pakistan. We have repeatedly drawn the attention of your Government to this. During the last five weeks, raids into Kashmir State territory across the cease-fire line and elsewhere have also been intensified. As you know, we have drawn attention of the United Nations to these serious developments. My Government cannot ignore this continual talk and preparation for war in Pakistan and we would be failing in our duty if we did not take effective defensive measures.

I would earnestly request you to stop the propaganda for Jehad and war against India in Pakistan. This will help more than anything else in improving the relations between our two countries."

Gradually, Mr. Liaquat Ali Khan's position was becoming desperate because of his failure to settle the Kashmir affair and secure the territory for Pakistan as promised by the late Prime Minister. In his communication dated 20th July, 1951, to Pandit Nehru, he remarked, "You have also referred to No-War declaration. But as you are aware, the proposal for a No-War declaration could not be carried out to a conclusion only because of your refusal to agree that if disputes between India and Pakistan could not be settled by negotiation and mediation, they should be referred to arbitration. In spite of clear direction in your Constitution calling for settlement of international disputes by arbitration, you maintained that it was beneath your national dignity to agree to this procedure. There can be no clearer proof of Pakistan's desire for a peaceful solution of its disputes with India than the proposal I have repeatedly put to you that all our disputes should be settled by negotiation and mediation and failing that by arbitration. Unfortunately you have preferred threat or use of force in settling disputes in you favour wherever the opportunity has offered itself."

To this the Prime Minister of India replied in his telegram of 23rd July 1951, that threats of war over Kashmir in the Pakistan Press have occurred almost daily for many months. He quoted some bellicose speeches made by responsible officials in Pakistan.

The Prime Minister of India refuted the charge that India had persistently refused to allow a peaceful solution through a free plebiscite in Kashmir. It is the armed aggression of Pakistan which stands in the way of peaceful solution of the Kashmir dispute. So long there are Pakistani forces on the Kashmir soil there cannot arise any question of peaceful solution. India is not opposed to arbitration as a principle, but the question of arbitration can be raised only when other means like negotiation or mediation has failed. But before any plebiscite can take place, conditions must be created for that, that is, all forces of aggression must be withdrawn from the territory of Kashmir. "It is not for India or Pakistan whatever our wishes, to decide the future of Kashmir. Kashmir and the people of Kashmir are not commodities for barter or for bargain.

It is their inherent right to determine their own future. It is this right that we openly acknowledged long before Pakistan came into this picture. We stand by that declaration and, even in our relations with the Kashmir State, we have shown that, in spite of the abnormal conditions that have prevailed, that state has had the fullest autonomy to develop according to the genius of her people" thus wrote the Prime Minister of India.

VI. INDIA PROTESTS TO U.N. ON BORDER INCIDENTS

India protested to the Security Council for violation of her border by Pakistani troops and nationals. Sometime in the middle of the year 1951, there was a series of violations of the cease-fire line in Kashmir by Pakistani troops. Three border incidents referred to in the protest occurred at intervals of two days each—June 23, 25 and 27. One of these incidents occurred in Jammu Province inside Indian territory and 800 yards from the border. Two of the Indian troops were ambushed by the Pakistani armed forces and killed.

Another incident quickly followed, also within the Indian territory in the same area. Our patrols were fired upon by the Pakistani troops causing fatal injury to some.

On July 6th, India reported to the Security Council four further alleged violations of the cease-fire line in Kashmir by Pakistan. On June 30 the Indian Prime Minister informed the Security Council that within the previous fortnight three incidents had occurred in which Indian troops had been killed. These incidents involved violations by Pakistan of the cease-fire agreement.

VII. PROTEST TO KARACHI FOR VIOLATIONS OF DELHI PACT

India sent a protest note to Pakistan in early August, complaining that the Government of East Bengal had, in contravention of the Delhi Pact, taken a number of steps calculated to create panic among the minority community, making it more difficult for them to stay there. The Note said that a large number of Hindu houses including those occupied by owners, or their relatives or tenants, were being requisitioned. Most of these were requisitioned not for urgent Government requirements, but for private individuals of the majority community. Specific cases have been brought to the notice of the Central Ministers, but the process of requisitioning continues.

In direct contravention of Clause (*iv*) of Part B of the Prime Ministers' agreement, which guarantees to evacuees and migrants unrestricted rights of disposal or exchange of property, the East Bengal Transfer of Property Ordinance restricts transfers of more than 10 bighas of khas land without the permission of the Collector. These rights are also nullified by the demand from migrants of income-tax discharge certificates before registering sales. Certificates are issued from Dacca only, resulting in delay and difficulty to sellers. The East Bengal Evacuee Property Managing Committee has not taken charge of any property belonging to migrants, although thousands of applications are pending with the different officers.

A large number of Hindus have been arrested under the East Bengal Special Powers Ordinance for alleged prejudicial activities. Reports continue to be received, says the Note, that a large number of Garos, Hajongs and other tribal people have been dispossessed of their lands and houses on the border of Mymensingh district on the ground that these tribesmen were under communist influence. Heavy punitive taxes ranging up to Rs. 1,400 have been imposed on some of the returning migrants.

The East Bengal Labour Commissioner has issued a circular embodying the recommendations of the Labour Advisory Board enjoining the employment of Muslims in all future vacancies in industrial firms and private concerns.

The minority community is in practice debarred from recruitment to the Ansar organisation. This organisation is generally highly hostile to the Hindus. Moreover, the Ansars are being used for police duties, such as searching of migrants and other passengers at border stations, in contravention of the agreements reached in April and December, 1948.

The Director of Public Instruction, East Bengal, has laid down new syllabus for schools. The new text books contain many hostile references to India, the Indian National Congress and the Hindu religion and civilisation calculated to arouse hatred in the minds of the majority community towards the Hindu religion and culture. Hindu children are forced to study these textbooks.

The Note urges the Pakistani Government to take immediate measures to remedy the action.

VIII. KASHMIR PROBLEM

The Kashmir dispute continued to be the main source of conflict between India and Pakistan. After the failure of Sir Owen Dixon's mission, some informal attempt was made at the Commonwealth Prime Ministers' Conference in January to settle the dispute and India was requested to agree to arbitration. But India refused to entertain any proposal for demilitarisation of arbitration so long as the Pakistani troops are on the soil of Kashmir. As such, nothing tangible happened in the matter until the joint endeavour of the America and Britain to resolve the dispute in February. The Anglo-US resolution presented to the Security Council at Lake Success on 22 February 1951 proposed to appoint a successor to Sir Owen Dixon as the representative for India and Pakistan to prepare plans for an overall plebiscite after effecting demilitarisation of the State.

Should the UN representative fail to bring about full agreement between India and Pakistan, the two countries were asked to accept arbitration, appointed by the International Court of Justice.

Meanwhile the two Governments were requested to observe faithfully their agreement regarding the cease-fire and to ensure the creation and maintenance of an atmosphere favourable for further negotiations.

The resolution states that according to Sir Owen Dixon's conclusions, the main differences relate to the procedure for and the extent of preparatory demilitarisation and the degree of control over the administration necessary to ensure a free and fair plebiscite. In regard to demilitarisation, the UN representative was asked to proceed on the basis of proposals made by Sir Owen Dixon, with any modifications as seemed advisable.

No specific instructions were given to the UN representative about overcoming the second difficulty beyond asking him to ensure a free and impartial plebiscite conducted under UN auspices. An important suggestion which the representative was to bear in mind related to the possibility of readjustments of territory, based on geographical and economic considerations after the conclusion of an overall plebiscite. This may be taken to mean that the interests of the side which does not secure the majority of votes in the proposed overall plebiscite, would not be ignored: in other words, accession either to India or to Pakistan would be ensured for certain contiguous areas. In the preamble it was stated that the decision of the Constituent Assembly of Kashmir would not cover the whole State.

While repeated allusions were made to Sir Owen Dixon, including his conclusions about demilitarisation, the resolution did not refer to his final recommendation that parties be left to themselves in negotiating for a settlement. On the other hand, the resolution regards it as "the duty of the Security Council" in the interests of the international peace and security "to aid the parties to reach an amicable solutions."

India's Views —This resolution raised a volume of protest from India as the draft resolution did ignore India's point of view that Pakistan was an aggressor in Kashmir and both India and Pakistan cannot be treated on the same footing. The resolution was definitely a challenge to India in so far as it implies that India had no right to be in Kashmir and as such her troops must also be withdrawn with those of Pakistan's. Consequently India rejected the resolution. India also objected to the forced arbitration clause. On March 1, India rejected the Anglo-American proposals.

On that day, Sir B. N. Rau, the Indian delegate, told the Security Council that India was wholly unable to accept the resolution. He declared that it would unsettle what had already been settled. If the resolution was passed, he added, it would amount to a repudiation by the Security Council of decisions previously made by the UN Commission with the agreement of the parties and the Commission's assurances given to India.

Under the resolution of August 1948 and January 1949, it was for Pakistan to withdraw its army first and only thereafter was India to begin to reduce her forces. Yet India has already reduced her army in Kashmir by more than 25 p.c. without waiting for Pakistan to her part of the reduction. The present legal position was that, said Sir B. N. Rao, Kashmir was a unit of the Indian Federation, subject to Federal jurisdiction in respect of the broad categories of defence, external affairs and communications, but completely autonomous in almost all other matters.

In the autonomous sphere, the state is entitled to frame its own constitution, and for this purpose to convene a Constituent Assembly of its own people. So far as the Government of India is concerned, the Constituent Assembly is not intended to prejudice the issues before the Security Council, or to come in its way.

India objects to the resolution mainly because it runs counter to the decision previously taken by the UN Commission for India and Pakistan with the agreement of the parties. The resolution departed materially from the provisions of the resolution of August 1948 and of January 1949 to which India had agreed, upon certain assurances, in the hope of securing a peaceful settlement.

Under the resolution of August 1948, Pakistan was to withdraw its troops completely from the State and India was to withdraw the bulk of its forces—not all its forces, but bulk, a small portion being left in the State to ensure security. To remove any suspicion that even this small portion might interfere with the freedom of plebiscite, provision was made in the resolution of January 1949 for the plebiscite Administrator to determine in consultation with the Government of India, the final disposal of

Indian and State armed forces, such disposal to be with due regard to the security of the State and the freedom of plebiscite.

India was and is prepared to take in consultation with Plebiscite Administrator, all measures that may be necessary to prevent any such forces interfering with the freedom of the plebiscite. The two resolutions had made provision not merely for the withdrawal or reduction of armed forces, but also for the freedom of the plebiscite consistent with the requirements of security. These two resolution were agreed to by all the parties. Sir Owen Dixon was somehow led to make proposals for demilitarisation which seriously departed from the above agreed scheme.

The draft resolution contemplated to instruct the new UN representative to effect demilitarisation on the basis of Sir Owen Dixon's proposals with such modifications as the new representative may deem advisable.

These proposals go back on the agreed resolutions of August 1948 and January 1949, the changes being all in favour of the Pakistani army, which had entered the State in contravention of international law and against the Indian army, which had lawfully entered the State to repel invasion. India therefore was unable to accept these proposals as a basis, nor could it agree to vest the new representative with the power of decision in so vital a matter.

India was wholly unable to accept any entry of foreign troops in the State or in any other part of India. In view of the provisions made by the resolutions of August 1948 and January 1949, there was no occasion for the use of foreign troops or of special local levies. Nor, could India accept any supersession of the lawful Government of the State or any interference with its normal functions.

The sovereignty of the entire State must necessarily vest in the lawful Government of the State, and because of this it was stipulated that the plebiscite administrator should be formally appointed by the State Government. All this was recognised by the UNCIP. There was a tendency in certain quarters to assume that this is just a dispute between India and Pakistan, and that the views of the lawful Government in Kashmir need not be consulted.

Revised Resolution on Kashmir—On March 21, 1951 Britain and the USA submitted to the Security Council a revised version of their joint resolution on the Kashmir question. One important change was the deletion of the provision in the previous draft that the new UN representative should be guided by the principles of demilitarisation put forward by Sir Owen Dixon, the previous UN representative.

The new draft instructs the UN representative to effect demilitarisation on the basis of the resolutions passed by the UN Commission in August, 1948 and January, 1949. Also deleted was the provision that the UN representative be authorised to consider: (1) the report of Sir Owen Dixon; (2) the possibility that forces might be provided from member states of the UN or raised locally; and (3) the possibility that boundaries of areas contiguous to the frontiers of India or Pakistan might be adjusted. The preamble was untouched.

The amended resolution appears to recognise the force of India's objections to the original proposals presented to the Security Council on February 21. India insisted that she should not abandon her right to determine what forces were needed for the security of the State and that such a right had been recognised in the UN Commission's resolutions of

August 13, 1948 and January 5, 1949. While the Indian viewpoint on the principle of demilitarisation may thus be regarded as having been practically accepted, their earlier objection to arbitration has not been met in the amended resolution.

According to Clause 6 India and Pakistan are asked to agree to arbitration over points which continue to be in dispute after three months' efforts to resolve them by the proposed UN representative. India's stand on the question of arbitration is that it is wrong to subject to arbitration any issues over which agreement has already been reached in terms of previous UN Commission resolutions. Such issues include the main principles governing the demilitarisation of forces on either side, an acceptance of which is again implied in the revival of the UN Commission's proposals on the subject.

Security Council approves Anglo-US Resolution on Kashmir—On 30th March, 1951, the Security Council approved the Anglo-US resolution calling for the appointment of a new UN representative to try to solve the three year old dispute over Kashmir.

On 2nd April, 1951, Pandit Nehru declared that the Kashmir resolution was not acceptable to India. It was extraordinary and contained certain provisions which were completely unacceptable to India. It had not helped in any way the search for a peaceful settlement of the Kashmir issue and the Kashmir resolution was sought to be imposed upon the people of Kashmir against will. "Nevertheless, we shall welcome any help in our search for a peaceful settlement of the problem. The proposed Constituent Assembly in Kashmir is an internal matter of state not conflicting with the Security Council," added Pandit Nehru.

He further declared that the arbitration move was a challenge to the self-respect of the people of Kashmir, nay the people of India. "I am confident that we shall meet the challenge effectively," he said. Sheik Abdullah also severely criticised this resolution of the Security Council. He alleged that the Anglo-Americans had supported Pakistan by this resolution because they are sure of war bases in Pakistan in their global strategy. "So long as India and Nehru exist, we will not allow Kashmir's honour to be trampled down by any other power."

Sir Narsingh Rao, Indian delegate, told the Security Council, that the arbitration proposal in the Anglo-US resolution was a violation of the resolution on Kashmir agreed to by India and Pakistan in August 1948. "For this and other reasons, my Government cannot accept it." India had no objection to a new UN representative visiting India and Pakistan, if the Security Council so desires, to make a fresh attempt to assist, by suggestion, advice and mediation, how the proposals regarding demilitarisation under the resolutions of August 1948 and January 1949 should be implemented with due regard to the assurance given to India in connection with them.

Graham's Appointment by UN—On 30th April, the Security Council appointed Dr. Frank Fraham, President of the University of North Carolina, as UN representative in Kashmir by seven votes to nil with four abstentions. Dr. Graham was nominated by the USA and UK.

The British representative to the Security Council, Sir Gladwyn Jebb, explained that the resolution of 30th March calls upon the parties to accept arbitration only on matters which might be described as procedural rather than substantive—only on matters concerning demilitarisation of the State, which is the part of the procedure for holding a plebiscite, not on the substantive question of accession itself.

"Accession far from being decided by the UN representative or by the arbitral panel—is to be decided by a free vote of the inhabitants of the State." The task of the UN representative would be entirely one of negotiation. The resolution instructs him that after consultation with the Governments of India and Pakistan, he should make best endeavours to obtain their agreement to a plan for the demilitarisation of the State of Jammu and Kashmir according to the principles contained in the two UNCIP resolutions. The duty of securing demilitarisation should be such as a plebiscite could be held free from any influence by armed forces of any interested party to the dispute but nevertheless his task will be negotiation and not of arbitration. If India and Pakistan cannot agree to a plan of demilitarisation, then the question of arbitration would arise and arbitration would deal only with the points of difference concerning demilitarisation, —said Sir Gladwyn Jebb.

Kashmir Constituent Assembly—By the end of November, 1951, the Kashmir Constituent Assembly had started its session. Ghulam Mohammed Sadiq was elected as its permanent Chairman.

Because of India's secular democracy and industrial development, the Kashmir Constituent Assembly ratified the accession of the State to India. Its merger with Pakistan or maintaining its separate and independent existence was not at all raised in the Assembly. Sheik Abdullah said on 5th November to Assembly: "In the final analysis, it is the kinship of ideals which determines the strength of ties between two States (meaning India and Kashmir). The Indian National Congress has consistently supported the cause of the States' people's freedom. If we accede to India, there is no danger of a revival of feudalism and autocracy. Moreover during the last four years, the Government of India have never tried to interfere in our internal autonomy. This experience has strengthened our confidence in them as a democratic state."

It may be noted here that on June 22, Pakistan called on the Security Council to take "effective and adequate measures" to prevent India from convening the Constituent Assembly in Kashmir. Pakistan was afraid that the establishment of the Constituent Assembly would bypass the UN's authority and Pakistan's case would be prejudiced.

Graham Report—Dr. Graham came to India and Pakistan in April, 1951 and visited Kashmir. He held talks with India and Pakistan for many times to ascertain the views of each party and also to secure an agreement over the Kashmir issue. Dr. Graham left India in the second week of September and before his departure he handed over to India his preliminary draft report on Kashmir. To the UN he submitted his report on 21st December. He said that agreements could not be reached on four basic points over demilitarisation. The four points on which agreements could not be reached are:

1. Agree that subject to the provisions in para eleven below the demilitarisation of the State of Jammu and Kashmir contemplated in the UNCIP resolutions of August 13, 1948 and January 5, 1949 shall be effected in a single continuous process.

2. Agree that this process of demilitarisation shall be completed during a period of 90 days, unless another period is decided upon by the representatives of the Indian and Pakistan Governments.

3. On Pakistan side: Agree that the demilitarisation shall be carried out in such a way that at the end of the period referred to above the situation will:

(A) On the Pakistan side of the cease-fire line:

(*i*) The tribesmen and Pakistan nationals not normally resident therein who had entered the State for the purpose for fighting will have been withdrawn. (*ii*) The Pakistan troops will have been withdrawn from the State and (*iii*) large scale disbandment and disarmament of the Azad forces will have taken place.

On Indian Side: (B) On the Indian side of the cease-fire line: (*i*) The bulk of the Indian forces in the State will have been withdrawn; (*ii*) Further withdrawals or reduction as the case may be of the Indian and the State armed forces remaining in the State after the completion of the operation referred to in B(*i*) above will have been carried out.

So that at the end of the period referred to above (*i.e.,* 90 days) there will remain on the present Pakistan side of the cease-fire line a force of civil armed forces and on the Indian side of the cease-fire line a force of a certain military forces.

4. Agree that the Government of India shall cause the plebiscite Administrator to be formally appointed to office not later than the final day of the demilitarisation period referred to above.

The United Nations representative has carefully considered the situation on the sub-continent with regard to the relations between India and Pakistan in general and the Kashmir problem in particular. Furthermore, he has paid careful attention to the views put forward by both parties, and he has sought to narrow the differences between the parties on the basis of the 12 proposals of the plan as a whole which was noted with approval by the Security Council on November 10, 1951.

Changes in Original Proposals—Dr. Graham then suggested the following changes in his original proposals:—

1. "The process of demilitarisation shall be completed on July 15, 1952, unless another date is decided upon by the representatives of the Indian and Pakistan Governments."

(In the original proposal, Dr. Graham suggested a period of 90 days as a time limit for demilitarisation).

2. At the end of the demilitarisation period, there should remain on each side of the cease-fire line the lowest possible number of armed forces based in proportion to the armed forces existing on each side of the cease-fire line on January 1, 1949.

(The original Graham Plan had provided for fixing a definite number of civil armed forces on the Pakistan side and a certain military force on the Indian side).

The report also maintained Dr. Graham's original proposal that the Plebiscite Administrator should be formally appointed to office not later than the final day of the demilitarisation period. According to his new suggestion, this would be July 15, 1952.

Although exact official reaction to Graham is not available in India, it is said that the report might be helpful inasmuch as the UN representative has refused to apportion praise or blame on either party, and has made an objective study of the situation.

In regard to the two questions, namely, demilitarisation and appointment of the plebiscite administrator, Indian opinion is that the settlement of the demilitarisation issue should precede the appointment of the plebiscite administrator. That is, "the appointment of a plebiscite administrator before he can function effectively would be premature."

INTERNATIONAL AFFAIRS

I. RUSSIA ON THE ISSUE OF GERMAN REARMAMENT

Over the western powers' proposal on Big Four talks on the question of German rearmament, the Russian reply states that a meeting of the Council of Foreign Ministers is necessary—the last was in June 1949—and that it is "essential to examine first of all the question of the demilitarisation of Germany which is the most acute problem in Europe." The Russian note was handed over to the three Western Powers on January 1, 1951.

Russia remains—so the note runs—the one genuine defender of the Potsdam agreement and its supervision by the Council of Foreign Ministers should be arranged. Russia suggested that the Prague declaration made by the eight eastern European Governments should form the basis for the discussions, but said that she was willing to expand the talks to cover other German questions.

Accusing the West of rearming Germany, the Russian note declares: "It can be seen from the published data that the Governments of the USA, France and Britain are creating a regular German army in Eastern Germany not just forming some sort of police detachments—as the Foreign Ministers of the three Western Powers have stated officially—but whole divisions."

The Russian Note made four demands to the West. They were: (1) A ban on German militarisation; (2) a ban on a revived German war potential, but no restrictions on a peace industry; (3) conclusion of a peace treaty under the Potsdam terms and withdrawal of all occupation forces within a year from the treaty; and (4) formation of one Government for all Germany.

The Note said that the rearming of Germany by the West was a breach of the Potsdam agreement and also create serious difficulties in the solution of all problems which have to be discussed by the Council of Foreign Ministers.

The Potsdam agreement signed in Berlin in August 1945 by M. Stalin, President Truman and Mr. Attlee, split Germany into three zones of occupation.

Its main points provided for: (1) The complete disarmament and demilitarisation of Germany and the elimination of control of all German industries which could be used for military production; (2) destruction of Nazism; (4) preparation of the eventual reconstruction of German political life on a democratic basis; and (4) reparations.

II. STRUGGLE BETWEEN PEKING AND MOSCOW

It has been reported from the USA that the Korean war has revealed the increasing "Titoism" of Communist China's President, Mr. Mao-Tse-tung. The report issued by the State Department officials in Tokyo described the present Korean war, in which communist China is playing an increasingly major role, as the focal point of the struggle between the Kremlin and Peking for gradual domination of communism in Asia. It is believed that the balance has shifted since June 1950 when Russian-trained North Koreans invaded South Korea. At that time, it was a Kremlin-backed venture; but now the Red star of China is in increasing ascendancy, as her troops bear the brunt of the latest offensive to drive the UN right off the peninsula.

China's prestige has skyrocketed through Asia because her troops have been successful against UN forces where Russian trained troops earlier failed. During Mr. Mao Tse-tung's protracted stay in Moscow in 1950, it was believed they were confronted with numerous differences of opinion which were still unsurmounted. Mr. Mao, now becoming the Tito of Asia, is believed to be causing the Kremlin red faced.

After the armistice with Japan, Russian and Chinese communist troops rushed to Korea to stake claims. Since then there has been constant rivalry between the groups. The attack on South Korea is said to have been made at Russia's behest. The fact that it was unsuccessful until the Chinese intervened to save the day is believed to have strengthened the Chinese cause throughout Asia and weakened Russian prestige.

These Chinese communism is different from Russian communism. The Chinese communists are merely practical agrarian reformers, whose Marxist-Leninist doctrine is quite superficial. The Chinese communism stands for the "union of the four classes" (proletariat, peasants, petty bourgeoisie and national bourgeoisie) under the leadership of the Communist party—a conception which sounded less sinister in capitalist ears than the old formula of the "dictatorship of the proletariat."

The Chinese variant on communist theory, however, is said to be a legitimate development of Leninism, and is by no means incompatible with the faith as held in the Soviet Union. The Chinese communists admit that their revolution is, in the words of Liu Shao-chi, "generally speaking, still a new-democratic revolution against imperialism and feudalism and not a revolution of a socialist nature."

The Chinese Communist party was modelled on the bolshevism of Lenin and Stalin, untainted by traditions of social democracy. The Chinese Communist party upheld the principle of the peasant's war led by the working class. Mao Tse-tung campaigned against the vagabondism of the old type of peasant's war. The most fundamental point was the leadership of the proletariat of the Chinese Communist party or of bolshevism.

The fundamental point is indeed the supremacy of the communist party, which determines the character of the regime, even though the larger part of the national economy remains for the time being in private hands. In the original Marxist theory, the objective was socialism and the forces for bringing it about were exclusively those of the proletariat. But Lenin put forward the idea of a highly disciplined party of "professional revolutionaries," and exploited the land hunger of the Russian peasantry force, though the transformation of millions of tenants into peasant proprietors was formally contrary to the socialist objective, and the whole idea of an alliance with the peasants was then condemned by old fashioned Marxist. Mao Tse-tung has gone even further than Lenin in the tactical use of class alliances; he has found room for the petty bourgeoisie and national bourgeoisie (*i.e.,* Chinese capitalists without links with the Kuomintang or foreign capital) against the triple headed enemy consisting of feudalism, bureaucratic capitalism and imperialism (*i.e.*, landlords, business enterprises run by Kuomintang politicians and all foreign capitalist concerns).

Both in the Russian and Chinese examples what is important from a Marxist-Leninist point of view is that the Communist party gains power by exploiting the short-term desires and grievances of various discontented classes, even though these have nothing in common with its own ultimate aims. When it has established its own absolute power, it can dispense with such alliances and proceed towards its goal at whatever pace appears expedient in the circumstances. Unlike internal policy of the Chinese communist party, foreign policy is not affected by any need for going slow owing to the backwardness of a country's economy or the absence of the technical conditions for socialism; the principle of the solidarity of the "democratic camp" (*i.e.*, the Communist states) against the "imperialist camp" (*i.e.*, Europe and America) operates from the beginning. Thus the policy of the new regime in China was very fairly described from Peking in a broadcast: "the political line of internally carrying out the people's democratic dictatorship under the leadership of the working class and internationally uniting with the Soviet Union and the revolutionary peoples of the world."

III. COMMONWEALTH CONFERENCE AND MIDDLE EAST DEFENCE

The Commonwealth Prime Ministers' Conference which opened in London on 4th January, 1951, discussed many far reaching subjects concerning the defence and other allied matters affecting the members of the Commonwealth. The Pakistan Prime Minister, Mr. Liaquat Ali Khan did not at first join the conference on ground that the Kashmir issue was not put on the agenda. Mr. Attlee sent a special cable to the Pakistan Prime Minister requesting his presence in the conference. Mr. Attlee suggested that the Kashmir dispute could be considered out of conference by a number of the visiting Prime Ministers including Mr. Nehru, Mr. Menzies, Mr. St. Laurent and Mr. Attlee himself. Mr. Liaquat Ali Khan at last joined the conference on this assurance.

At the conference Mr. Nehru championed for the communist China and pleaded for the recognition of communist China by the major powers. Only four Commonwealth countries—Britain, India, Pakistan and Ceylon—have so far recognised the Peking regime. Australia, New Zealand, Canada and South Africa have not yet done so.

Mr. Menzies and Mr. Holland, the Australian and New Zealand Prime Ministers, were anxious that the conference should not create any impression that the Commonwealth policy opposes that of America. Both Australia and New Zealand feeling themselves isolated in the Pacific, are disappointed at India's "middle of the road" policy. These two dominions would like to see a Pacific pact defence scheme brought into being side by side with the Atlantic Treaty Organisation. Both countries have pointed that such a pact could not operate without US help.

Britain reaffirmed her China policy and Mr. Bevin maintained that recognition of Communist China was a condition of a Far Eastern settlement and that this did not involve appeasement in any way.

UK's Far East Policy—Mr. Bevin outlining the British views on the Far Eastern crisis, based his approach in the Commonwealth Conference on the following main basis: (1) Limit the area of conflict in the Far East;

(2) Stand fast to the principles underlying the joint UN action towards Korea; and

(3) Shape Commonwealth policy so as to take into account both realities—the US attitude and the Chinese outlook.

On Formosa, Britain was understood to favour some form of UN supervision pending circumstances permitting the implementation of the 1943 Cairo declaration to join Formosa to the Republic of China. The conference failed to agree on the future of Formosa. Both India and Pakistan agreed that Japan should be brought back into the comity of free nations at the earliest.

Middle East Defence—The conference discussed the question of Middle East defence, but India, Ceylon and Pakistan were not represented at these talks. Under present peace time arrangements, the Middle East Defence is shouldered by the United Kingdom alone. In the event of war, other dominions can be expected to send troops to this area. On account of the defence commitments of Britain in Europe and the Far East, greater responsibility will be assumed by some of the Commonwealth members, like South Africa, Australia and New Zealand in this region especially in the event of a war. South Africa has already agreed to take on an important burden for defence in an emergency in Egypt and the Suez Canal zone as well as in the Eastern Mediterranean zone of Greece and Turkey. There is of course no question of South African troops' relieving the British in Egypt and the Suez canal zone as, under the Anglo-Egyptian Treaty, only British troops can remain on Egyptian soil, but in the event of war in which Britain is involved, Commonwealth troops would be used in Egypt.

Defence co-operation between Ceylon and Britain is defined in the Anglo-Ceylon defence agreement of 1947. India and Pakistan cannot be expected to send troops to Middle East so long their respective armies are pinned down at the Kashmir frontiers glowering at each other. Australians and South Africans are unready to shoulder the burdens of taxation and compulsory military service which preventive reinforcement of the Middle East would entail. The free world—vulnerable here—must go on hoping that the cautious Stalin will walk warily in an area which is, after all, also the heel of the Soviet Achilles.

Mr. Bevin presented a six-point plan for settling the Korea and Communist China issues. In a six point memorandum he suggested that: (1) Recognition of communist China and its representation at the UNO; (2) A cease-fire in Korea; (3) Creation of a cordon sanitaire—a no man's land; (4) Setting up of a UN Commission; (5) A phased withdrawal of both Chinese and UN forces; and (6) a free and impartial plebiscite for a united Korea. But there was much difference over the recognition of the Communist China among the members of the Commonwealth.

IV. U.N.O., KOREA AND CHINA

The war in Korea has been going on for about two years. The universal approval which was given in June 1950 by the allied nations to the United Nations' actions on behalf of South Korea, has now lost much of its encouragement and on the contrary a widespread apathy about the cause for which allied troops are fighting in Korea is now appreciably on the increase. Most of the allied nations, particularly Britain, feel that peace at any price should be obtained in the Far East. The real issue at first was to repel and drive back the North Korean invaders and restore the state which had been the victim of aggression. But since the crossing of the 38th parallel and the advance to the Yalu, the original clarity of purpose has been replaced by confusion about the objective and in consequence, a general demand for terminating the war by negotiation with China without any idea of minimum terms has been canvassed by responsible parties to the dispute.

The decision to cross the 38th parallel politically, and not merely for tactical military purposes, was taken by the Political Committee of the United Nations Assembly on October 4th 1950 and formally adopted by the Assembly itself on October 7. The resolution recalled the Assembly's declaration of December 12, 1948, that the Government of the Republic of Korea "is based on elections which were a valid expression of the free will of the electorate of that part of Korea (*i.e.,* South Korea) and which were observed by the Temporary Commission, and that this is the only such Government in Korea." It was therefore decided that all appropriate steps be taken to ensure conditions of stability throughout Korea, and that all constituent acts be taken, under the auspices of the United Nations for the creation of a unified, independent and democratic Korea.

This resolution meant that the Commander-in-Chief of the United Nations' forces in Korea was authorised to advance into North Korea in order to eliminate all armed forces and civil authorities of the Communist regime and ensure conditions of stability throughout Korea. The United Nations forces as distinct from South Korean troops, did not cross the 38th parallel until they were authorised to do so by this resolution. They had reached it already on October 1st, but General MacArthur halted them for eight days until the Assembly had taken its decision.

After the advance into North Korea had led to a military disaster and the Korean conflict had developed into a struggle with communist China, the British Government became anxious to minimise its responsibility for sponsoring the decisive resolution of the United Nations, and its defenders resorted to the argument that General MacArthur had not needed the authorisation of the United Nations to cross the parallel. This argument was valid in so far as General MacArthur's commission to carry on war against the North Korean forces certainly empowered him to conduct operations beyond the 38th parallel for purely military reasons as part of the task of repelling the invasion of South Korea. General MacArthur could not have justified an advance to the Yalu without the authority of the United Nations' decision of October 7th 1950, and in fact he held his forces back until that decision had been taken; the Supreme Commander neither forced the hand of United Nations by acting in advance of its decision, nor did he subsequently exceed the directive given to him.

The United Nations decision in the first week of October 1950 was taken under the influence of the successful Allied counter-offensive in the second half of September which had resulted in the recapture of Seoul on the 25th. At first there was some doubt among the allied nations whether China would dare to challenge the power of the United Nations and it was generally believed that Russia would not risk a war on the Korean issue; without Russia it seemed incredible that the Chinese communists would dare to challenge the whole power of the United Nations after this power had been so strikingly demonstrated by the recapture of Seoul. Even after

Chinese forces had actually crossed the Yalu, the move was regarded as a bluff for bargaining purposes rather than as a real order of battle, and it was the persistence of this belief at General MacArthur's headquarters which led to the final strategic miscalculation of the offensive in the fourth week of November, 1950.

It is true that Chinese regular military units did not cross the Yalu until after the United Nations forces crossing of the 38th parallel. It does not follow however that the Chinese intervention was prompted merely by alarm at the prospect of the arrival of United Nations forces on the Manchurian border. It is necessary to take into account the actions of Communist China before that date. The Peking Government and its controlled press and radio had from the outset given the most explicit approval and moral support both to the initial North Korean aggression against South Korea and to the subsequent North Korean defiance of the United Nations. On August 17th Mao Tse-tung and Chou En-lai sent Korean independence anniversary greetings to Kim-Il-sung declaring that "the Chinese people warmly support the Korean people in their just war against American imperialism and aggression to bring about national independence and unification."

Nor was this backing of North Korean aggression merely verbal; it had taken a most concrete and practical form. Shortly before the North Korean divisions of the Chinese army, drawn from the million or more Korean settlers in Manchuria and other parts of China, were sent to Korea in 1950, and it was not until after the incorporation of these troops, battle trained in the Chinese civil war, that the North Korean Government felt ready to launch its assault.

In the first week of January 1951, there was withdrawal of the Eighth Army in face of a full scale attack by the Chinese army and the abandonment of Seoul finally dashed the vanishing hope that the United Nations forces might have been able to prevent the Chinese from entering South Korea. The departure of Mr. Syngman Rhee and his Government for Pusan instead of some town such as Taegu, in the centre of the South Korea, made it seem that there was not much optimism in General MacArthur's command about the possibility of creating a strong defensive position except in the South.

By March the campaign in Korea entered a new phase—that is, a change of public attitude that something new had happened for bringing about a settlement as neither side had won, or was likely to be able to win a decisive military victory. Three events helped to create the impression that the situation had changed. These were the United Nations advance northwards and the Chinese losses. Nearly all along the line, the United Nations forces under General Ridgway's command now stood once again on the 38th parallel—a most striking recovery from the winter setback when Chinese forces intervened. Secondly, General MacArthur's self-inspired invitation to the Chinese commander to call a cease-fire, whatever may be said about its propriety, was at any rate a call from strength, a summons with more than a hint that if the communists did not comply, Manchuria would eventually be bombed and the Chinese mainland invaded. Thirdly, there was renewed activity in the United Nations to draft a new declaration of policy about Korea.

In January 1951, Mr. Lester Pearson, at that time representing Canada on the Good Offices Committee made cease-fire proposals. These proposals were for an immediate cease-fire followed by consideration of further steps: for all non-Korean forces to be gradually withdrawn; for the Korean people freely to express their own wishes about their future government; for temporary arrangements for the United Nations to administer Korea; and for the establishment of a special United Nations body to negotiate a final settlement. They say nothing about unification and presuppose in effect that the two republics of North and South Korea will be restored.

Stalemate in Korea—Despite a number of hard fought local engagements, the military position in Korea is still one of stalemate—or rather of checkmate. There is now no question of the Eighth Army delivering a knockout blow to the Chinese armies without a substantial increase in the number of divisions. At present all that it can do so is to keep the Chinese in the area of the 38th parallel, inflicting the maximum number of casualties in local engagements to avert the threat of an overwhelming Chinese attack.

Exit MacArthur—For sometime President Truman and General MacArthur were not pulling on well. Their policies were in conflict with each other and the trouble was that the General, a military man, wanted to play politics. He forgot that it is dangerous for a military man in duty post to try to play the role of a statesman at the same time. The conflict in consequence at last came to a head and President Truman was rather reluctantly compelled to relieve General MacArthur of his command on the 11th April and appointed Lieutenant-General Matthew Ridgway to succeed him as the Supreme Commander of the UN forces in Korea. The fundamental issue raised by General MacArthur's insubordination is that of civilian authority over military commanders. General MacArthur's policy was to bomb and blockade China, send General Chiang-Kai-shek's men into battle, was to localise the Korean war and try to create a climate in which a settlement is possible. Further, General MacArthur pleaded for the occupation of Formosa on a permanent basis as a war base to the United Nations and this would offer a spring board for future offensive against the Communist China or Russia, if war breaks out on global basis.

Peace Talks on Korea—The removal of General MacArthur brought about a change of outlook on either side of the belligerents and there was an atmosphere of truce. On 23rd June, Mr. Malik, the Soviet delegate at the United Nations headquarters, proposed that the belligerents in Korea should start discussions for an armistice. Two days after Mr. Malik's statement, the Chinese communists' official newspaper declared that "the Chinese people fully endorsed his proposal"; the Governments of those members of the United Nations which had sent forces to South Korea's aid, held immediate consultations on the situation and agreed to make a new cease-fire offer. On June 29th General Ridgway, the UN Commander-in-Chief in Korea, broadcast to the communist commanders a message beginning "I am informed that you may wish a meeting to discuss an armistice" and suggesting a meeting on a hospital ship.

Generals Peng and Kim-Il-Sung, the Chinese and North Korean Commanders, replied on July 1st, agreeing to "talks concerning cessation of fighting and establishment of peace."

Communist Demands—At the first meeting, General Nam Il, the North Korean representative, immediately tabled proposals for the withdrawal of both armies to the 38th parallel and the subsequent withdrawal of all foreign forces from Korea in advance of a political settlement. The United

Nations representatives made it clear that neither of these conditions were acceptable. At first the communists insisted that there could be no cease-fire unless these terms were accepted. But on July 21st they obtained a four-days recess in order to study the rival proposals, and then agreed to defer the question of the complete withdrawal of troops to a later date.

This made it possible to begin discussions on the fixing of a demarcation line. But it brought no further progress, for the communists still flatly refused to discuss any line other than the parallel. Eventually Admiral Joy proposed for the United Nations that each side should appoint a single delegate to meet privately and explore the situation, and the Communists agreed to this, although they found it necessary to appoint two delegates, one North Korean and one Chinese. These small closed meetings began on August 17th, but it is impossible to judge whether they might have produced any results, for six days later the communists abruptly broke off all negotiations for an indefinite period.

The Neutral Zone—The reason given for this rupture was an alleged violation of the Kaesong neutral zone by a UN aircraft. To bring this occident into perspective, the whole history of the neutral zone must be reviewed. Kaesong lies near the West coast of Korea, in the only area south of the parallel still held by the Communists. When it was first proposed as a site for armistice talks, the United Nations suggested that a neutral zone should be round it, but the Communists rejected this proposal, and used their control of the area as a background for propaganda giving the impression that the UN delegates, entering Kaesong under white flags and guarded by Communists soldiers, were virtually suing for peace in the traditional manner of the defeated. General Ridgway accepted these humiliating conditions in order to get the talks started but dug in his heels when on the second day of the meetings UN press correspondents bound for Kaesong were turned back by armed Communist soldiers. The talks were suspended for three days, and resumed after the Communists had accepted the idea of a neutral zone and promised to withdraw all troops except a few policing patrols to at least five miles from Kaesong. This promise was broken on 4th August, when a company of armed Chinese was marched passed the conference building. General Ridgway again suspended the talks until adequate guarantees against further incidents were provided by the Communist commanders and in giving these guarantees on August 10th, Generals Peng and Kim promised that, if there was any similar violation of the zone by UN forces, they would not terminate the negotiations rashly and irresponsibly without going through the procedural "steps of protest, investigations consultation and settlement."

Twelve days later, these promises had apparently been forgotten. On the night of August 22nd, UN liaison officers were abruptly summoned to Kaesong and informed that all meetings were henceforth suspended. They were told that three hours earlier a UN aircraft had dropped three bombs in the conference area; but the only sign of damage was a hole in the ground six inches deep and two feet across, and the officers' request to be allowed to return in daylight for a further inspection was refused. During the next few days the Communist commanders not only accused the UN forces of having tried to murder their delegates, but produced a new crop of alleged violations of the Kaesong zone. The UN Command denied that any of its aircraft had been over Kaesong at the time of the alleged bombing, or that they had, as the Communists claimed, attacked vehicles in which Communist delegates were travelling to Kaesong; it had already denied a charge of responsibility for the death of a Chinese platoon commander in the neutral zone on August 19th. The UN however denied all these charges. The only charge it admitted to be true was one of firing on a point in the neutral zone by an aircraft on September 10th.

Since Mr. Malik's statement on 23rd June, the Communists attitude to cease-fire was not consistent and their charge that the UN Command had blocked the achievement of a cease-fire was not proved by facts. It was the UN Command which issued the first invitation to the talks, and then yielded to the Communists preference for Kaesong. It accepted Communists control of Conference zone as long as it was exercised with restraint. It sought a simple cease-fire based on the existing front, but indicated that it would consider reasonable adjustments to that line. The UN introduced the idea of holding small informal meetings in the hope of breaking the deadlock, and there may be significance in the fact that these meetings were apparently proceeding smoothly when the Communists broke off negotiations. It is again on the initiative of the UN Command that fresh contacts were now made between liaison officers on either side.

September—In the third week of September, the Communists opened a fresh chapter in the story of the Korean campaign by declaring their readiness to renew the armistice talks. General Ridgway had told them plainly, when they broke off the talks in August, that he was always ready to start again, provided the setting of any new meeting was such as to offer a reasonable chance of success; and he repeated that offer again. But not only was the basic question still unsettled on which the talks foundered before the San Francisco Conference—whether the Communists could bring themselves to accept any terms except the impossible ones of a cease-fire on the 38th parallel—there now seemed to be a dangerous tendency for the Communists to set too much store by the terms on which the main negotiations themselves should take place. To ensure the truce talks to be conducted in a neutral atmosphere, General Ridgway suggested an alternative site other than the Chinese dominated Kaesong. The Communist liaison officers, however walked out of the meeting rather than discuss these terms.

October—The deadlock over the truce negotiations in Korea had weakened the United Nations cause and produced a nervous impatience among the western countries in favour of winding up the war at too low a price. The Chinese Communists have cultivated in two and a half decades of incessant war, against the Kuomintang or the Japanese, the valuable habit of perseverence, and they think that they can wear out the United Nations by holding out for a truce on their own terms. The main cause of deadlock over the truce talks is that while the United Nations insist on retaining for the time being "a few miles of land" north of the 38th parallel, as in fact the parallel is the only possible line on which any lasting political settlement can be based, the Communists insist on fixing the truce line at the parallel.

It is not simply a question of choosing between the line on which the United Nations armies now stand and the 38th parallel. More important in this context, than either of these is a third line, the line which General Ridgway has built up into a formidable defensive barrier, and which runs in places north of the parallel but coincides only at a few points with the present battle line. Any withdrawal behind this third line would expose

South Korea again to the threat of a sudden assault from the north in almost the same conditions as those of June 1950. The parallel itself cannot be turned into a strong military position; neither the United Nations nor the Communists have ever succeeded it holding it. It is in no sense a tenable frontier. If the United Nations are to keep on faith South Korea, they cannot do less than provide it with a defensible frontier; if they are not to tie up an unnecessary proportion of their own troops in Korea for an indefinite period, they must find a line which can be held, at least against the first assault by a reasonably small force. Both arguments make clear the vital importance of basing whatever dividing line may eventually be adopted on General Ridgway's prepared positions.

Prospects at Panmunjom—The cease-fire talks in Korea were resumed after an interval of over two months at Panmunjom which was to be policed by both parties, instead of at Kaesong, where the Communists exploited their control of the area. Mao Tse-tung's speech on 23rd October was a trenchant restatement of the Peking Government's unconciliatory attitude to the Korean question. On this occasion Mao made it clear that the main task was to mobilise the Chinese people to continue, and indeed to strengthen the struggle in Korea, in particular by increasing production and practising "rigid economy in support of the Chinese volunteers." Meanwhile there is no sign of any ebb in the flow of hate-propaganda against America and its allies in the Korean war, which the Chinese and the North Korean press and radio were emitting daily. On 5th October Admiral Kirk, the American Ambassador approached Mr. Vyshinsky with a view to get Stalin's help in bringing about "a realistic peace agreement" in Korea. But Mr. Vyshinsky replied to the American Ambassador in Moscow that the USSR could do little to influence the course of the truce talks, since it was no party to them.

At the cease-fire talks at Panmunjom that was resumed in the last week of October, the Communists surprised everyone by offering to discuss an armistice line that differs by only two or three miles from the present fighting line. Although there was little actual progress until this second offer came on 31st October, the most notable change in the Communists came earlier. Almost at the start, the Communists, in reply to an offer by the United Nations of a buffer zone across Korea, proposed a cease-fire line in many places ten miles north of the 38th parallel. This was rejected out of hand by General Ridgway's negotiators, since it bore no relation to the military situation; it offered only Communists evacuation of the worthless Ongin and Wonan peninsulas in return for very substantial allied withdrawals on the main front. But its importance was that the Communists for the first time abandoned their claims to the parallel, on which the talks had foundered in August, 1951.

The question of fixing the armistice line is no more than the first item on the Panmunjom agenda. The second item to be thrashed out, before the UN forces could stop fighting is the agreement for mutual inspection by the opposing sides to see that an armistice would not be used for building up forces for a fresh offensive. The third item is the exchange of prisoners, and the fourth is recommendations to Governments for a permanent settlement. These are all formidable obstacles.

The question of the prisoners of war in Korea presents insurmountable difficulties. Mr. Eden declared that the cease-fire in Korea would be conditional on an agreement with regard to prisoners of war. He did not know where the British prisoners were or how many there were, that it had been found impossible to establish any contact with them, and that the International Red Cross was unable to obtain any information about them. The provisions of the Geneva Convention on Prisoners of War, which depend on the activity of the International Red Cross, are not operative in relation to any Communist state; for the Soviet Union is not a signatory to the Convention and does not allow the International Red Cross to function on its territory. Prisoners of war in a conflict with a Communist state are therefore not protected by any general international agreements, and if anything can be done for them it can only be as part of the terms of an armistice.

That there was ground for anxiety was shown by the minimum figures of prisoners killed that have now been disclosed by General Ridgway's headquarters. Colonel Hanley, judge-advocate of the Eighth Army in Korea, first jumped the gun with statistics which made headlines in the American press; he stated that 13,400 United Nations prisoners had been killed by the North Koreans and Chinese, of whom 6,270 were Americans, 130 of other allied contingents, and the rest South Koreans.

December—The armistice talks at Panmunjom seem to be moving, like John Peel's hounds, from a find to a check, from a check to a view; and the final kill was not reached before December 27th, when the provisional agreement on a cease-fire line reached at the end of November itself lapsed. The device of leaving the negotiations in the military commanders in the field has worked well enough during the purely military phase of the talks; if, however, a political settlement is to be reached, it must be handled at a political level. Moreover, the political machinery used must be within the framework of the United Nations organisation, for to set the UN aside at this stage would be to destroy the whole moral significance of the resistance in Korea. The problem is difficult. Neither the Security Council—in which the Russians hold the veto—nor the unwieldy General Assembly is a suitable body to handle the delicate question of a Korean settlement. The Good Offices Committee set up by the UN a year ago has never been recognised by the Chinese communists. Those UN member nations which have contributed to the defence of South Korea should have more say in the settlement than those which have not.

During the fourth week of December, the Communists supplied the lists of the prisoners of war after persistent insistence by the allies. But the list was found greatly disappointing inasmuch as it was not complete. It was still inaccurate and over one hundred thousand men had been listed as missing in Korea and it was estimated that more than approximately one in ten had survived as prisoners. Most of those still unaccounted for are South Koreans; but for the British, the new list implied that there was little hope for nearly a thousand "missing" and, for the Americans, some eight times as many. The Communists supplied a list of only 11,559 prisoners, whereas the allies supplied a list of 132,474 prisoners. It was naturally being asked by the allies what did happen to many of those of the allied soldiers who were not on the Communists' list. Were they still secretly held by the Communists and was the disclosure of their existence to be used in due course as another pawn in the grisly game of chess over the armistice talks at Panmunjom? Or have they been deliberately murdered in atrocities for which there had already been a certain amount of evidence?

Points on which deadlock persisted were the prisoners of war and the conduct of the opposing forces during the armistice. As regards the prisoners of war, the communist negotiators asserted that US prisoners were more likely to have died than others because they "could not stand up so well to disease and the Korean climate"—an assertion which the Allies have called "ominous" for the fate of the prisoners whom the Communists have failed to list.

Talks fail—No agreement therefore could be reached on the truce talks. Fierce fighting broke at dawn of 28th December, as the expiry of th truce talks deadline at midnight of 27th freed both sides to launch offensives in the knowledge that any military gains could be kept.

On 29th December, the UN made one more concession in the Korean truce talks and then said, "We have nothing further to propose."

The Allies offered to drop their demand for an inspection of North Korea during an armistice if the Communists dropped their insistence on renovating airfields during that time. The Communists said that the deadlock could be ended within 24 hours if the UN withdrew their demand for a ban on airfield reconstruction.

A UN Command broadcast said the Allies appeared to have the choice only between an armistice in Korea which would allow the Communists to strengthen their power or no armistice at all. The new UN offer dropped all reference to aerial inspection, but limited airfield building to certain specified ones agreed to by both sides for civil operations. Runways should not be extended on any airfield. The Chinese General Hsiehfeng insisted that the Allied call for an airfield construction ban was still the "main stumbling block" in the way of an agreement.

As the year passes on, the Korean situation remains unsettled with guns booming again in the Christmas atmosphere, not heralding peace, but death and calamity and sufferings.

V. BRITAIN, PERSIA AND OIL

The Persian oil trouble should not be viewed in isolation. It is one of the symptoms that the entire Middle East is in ferment and the countries of this region along with that of Asia have started a new era in the process of their rebirth. To understand the Middle East situation, we should have a deep in the history of this region.

Bases and Treaties in the Middle East—The Middle East was largely a British sphere of influence until the Americans entered the Second World War. Since then American interest has increased at a surprising pace so that, in less than a decade, thoughtful American politicians have grown to consider this "Bridge of Asia" as important to the United States as Disraeli thought it vital to Britain. The speed with which American policy developed was not only too fast for the understanding of the forty million odd Moslem inhabitants, but too revolutionary for the thousands of European officials, businessmen, and petroleum workers who reside in the area. Members of the Arab League led by Egypt have adopted a strangely neutral position which has been described as "haggling with the bazaar on fire". Their pact which owes its existence solely for fear of Israeli expansionism, is of little military value, and Jordan though an Arab State is not a perticipant. For this reason, difficulties and misunderstandings have risen between Britain and America on the spot and Arab governments have so long played off one party against another. The American political interest now is to defend these valuable possessions and ensure maximum amount of petrolium from these regions for Atlantic Pact powers in the event of hostilities.

Persian Oil Crisis—On 7th March, General Razmara, the Premier of Persia was assassinated by a small group of fanatics. General Razmara was called to power by the Shah when he was seriously alarmed by the revival of the outlawed Tudeh (Communist) Party last summer; but unfortunately the palace failed to give General Razmara the full support the Shah had promised to him. Before him, Persia was ruled by a clique of important landowners as well as politicians and because of their rule, the ordinary Persian was reduced to such a depth of misery that communist propaganda, coming from the northern frontier, has fallen on fertile grounds. The big landowners who wield enormous power in the Majlis (Parliament), were alarmed by the General's excellent plans for social reform. These were to be financed by the large sums of money, the Government would have received in royalties from th Anglo-Iranian Oil Company, had the Majlis ratified the supplemental agreement with that company. The agreement would not only have produced an immediate payment of £45 million, but would have guaranteed an annual income of over £22 million to finance long term draining, irrigation and other large works projects which formed the basis of General Razmara's plans for social reform.

The Majlis did not ratify the agreement which General Razmara had supported largely because the late Prime Minister failed to cope with the opponents inside the chamber and lacked political technique outside it. The landowners and their press began to declare that Razmara had fallen entirely under the influence of the west and was "working against Persian interests." This accusation was entirely false. In some respects the General appeared more influenced by Moscow. He had signed a new commercial treaty just before his assassination with the USSR and he allowed the Russians to send commercial travellers all over Persia; at the same time he banned the Persian broadcasts of the voice of America.

Dr. Mossadeq succeeded to the office of premiership after Hussein Ala, who became Premier on General Razmara's death. Dr. Mossadeq is the leader of the National Front, which is Persia's only semblance of a party; it is the noisy minority of eight deputies led by Dr. Mossadeq which had achieved considerable prominence and popular support, because of its programme for the "nationalisation of oil". This resulted ultimately in the expropriation of the Anglo-American Oil Company.

To understand the power politics which the Majlis so frivolously wields it is necessary to know a few facts about Persia's constitutional and political life. In Persia nothing much can be got done unless, Shah, Cabinet and Majlis move in the same direction and simultaneously. Secondly, the Persian cabinet does not sit in the Majlis; it is formed by some outside personality summoned by the Shah. Thirdly, parliamentary elections are in most constituencies a ramp in which it is easy to hire illiterate voters. Apart from Dr. Mossadeq's group, there are no parties; too few people trust "companies". Tudeh, the mass party under Russian direction, is forbidden and is chiefly busy in schools and universities. Most Persians, frightfully mindful of their experiences in the last years of their arbitrary dictator of the thirties, Reza Shah, are so fearful of dictation, though they decry the Majlis, they lie down under its irresponsibility.

After the death of General Razmara, the new Persian Cabinet brought a bill for the nationalisation of Persia's oil industry and the bill was passed by the Persian Lower House, the Majlis. The Upper House, the Senate, confirmed this decision on March 21, 1951. The British Government warned the Persians that there could not be unilateral cancellation of their agreement with that major British enterprise—the Anglo-Iranian Oil Company.

The present basis upon which the company extracts oil from the Persian subsoil is an agreement reached in 1937 with Reza Khan, the Shah. But these terms are against the interests of Persia and the Persians consider this to have been reached under duress.

The resentment in Persia was daily increasing on the point that Persia was becoming poorer day by day, while the Oil Company was earning a lot of money. Further, the American oil companies on the far side of the Persian Gulf reached a new royalty agreement with King Ibn Saud which contained the simple and joyous formula of "50-50". But still it is being held that of the two agreements, the Anglo-Iranian's "supplemental" was the better offer.

The Anglo-Iranian is the biggest of the Middle Eastern oil companies. Its 1950 production of almost thirty-two million metric tons surpassed its nearest competitor, American owned Saudi-Arabian; and it owns half of the third largest Middle Eastern producer, the Kuwait Oil Company. Its tanker fleet, containing nearly two million tons deadweight, is the largest of any company in the world. The £110 millions that have poured into drilling wells, laying pipe-lines and building refineries in Persia completely overshadows all other modern capital investments. Anglo-Iranian's labour force of over 70,000 comprises more than half of Persia's total industrial working class. Oil comprises 90% of Persia's foreign exports by value and provides five-sixths of its foreign currency.

Persians viewed the Anglo-Iranian Oil Company as a state within a state.

So powerful was the Company in Persia's political life that "nobody who has opposed the Company has ever succeeded in a government career." But these are now things of the past and stern fact is that the AIOC is now driven out of Persia.

The disagreement between the Persian Government and the Petroleum Company is no longer a local one. The effects of Persian action are already apparent in Iraq, where a movement to expropriate the petroleum field there is gaining ground. In Cairo Egyptians are demanding to expropriate the Suez Canal. There is a similar situation in the petroleum bearing island of Bahrein, to which the Persians have made loud and renewed claims.

The Americans were accused by the Britishers for not realising the importance of Persian oil and the significance of strategic control of Persia. During the negotiation talks with Persia, British press was rather suspicious of American attitude. It is said had America taken a bold attitude towards Persia, then it was likely that Persia would resiled from its expropriation stand.

After the assassination of General Razmara, Hussein Ala became the Prime Minister of Persia. It was during his term of office that on March 15 the Majlis and on 21st the Senate unanimously endorsed proposals to nationalise the petroleum industry and a commission was set up to consider ways and means of carrying them out. Before the time appointed for the commission to report its findings, the extreme nationalists under the leadership of Dr. Mossadeq forced their way to power; then without thought or even proper discussion, both houses, the Majlis and the Senate, unanimously supported the Nationalists' resolution to declare the Anglo-Iranian Oil Company already "nationalised" and proposed that a commission of eleven Persians should forthwith take over the affairs of the "late Company". On 26th April the thirteen days strike in the Company's refinery of Abadan and in the petroleum fields came to an end. Hussein Ala, who was then Prime Minister, thought it a suitable moment to discuss with the British Ambassador, Sir Francis Shepherd, possible solutions to the problems of nationalisation.

While several possible solutions were being discussed, Hussein Ala, the Prime Minister resigned because the Petroleum Commission, apparently inspired by Dr. Mossadeq, refused even to consider the proposals put forward by Hussein Ala. Hussein Ala's proposal envisaged the formation of a new, purely Persian company which would hold the sole rights to the oil from the present oilfields and would operate the wells, pumping stations and pipelines. The role of the AIOC would be to refine the oil and market it—in fact deal with all the essential international operations. The Persian Government would ultimately obtain its revenue not from royalties on the oil extracted, as was the condition prior to nationalisation, but by selling its own nationalised oil to the AIOC. But as neither the proposed new company nor indeed the Persian Government would have sufficient funds to compensate the Anglo-Iranian for the loss of its concession and at least £300 million of equipment, compensation would be paid for some forty odd years to come in oil, with an additional agreement that the highly trained British staff should work for the new Persian company during the period that compensation was being paid. But these proposals were not accepted by the Petroleum Commission which immediately suggested that Dr. Mossadeq should become Prime Minister. This proposal appeared, it is said, at least for a few hours, to have shocked the desperate and bewildered Persians, as the Nationalist leader Dr. Mossadeq was well-known to have no policy, nor did he wish to consider any policy save the immediate nationalisation of the petroleum industry. In his deep and bitter dislike of foreigners, he has convinced himself that the miserable poverty of millions of Persians is entirely due to the fact that their only large industry is in the hands of foreigners. Naturally such a theme, coupled with the promise of riches for all Persians as soon as the "wicked foreigners" have been expelled and Dr. Mossadeq's plan has been realised, finds enormous support among the people of Persia. He believes that when he has pushed the British lion out of Southern Persia, he will be able to escape from the mouth of the Russian bear in the north.

In the middle of the crisis, the British Government stepped in and took up the case of the AIOC. The common feeling in Britain over the oil dispute was that the USA did not support Britain's case with vigour and assertion and America's leniency or rather indifference in the dispute encouraged Dr. Mossadeq to proceed unhindered in the expropriation measure. Britain felt that she has been left alone to fight out the oil dispute. It is stated that the Americans hesitate to give their support to Britain in the Middle East crisis because they are dissatisfied with the nature and degree of the assistance they have received in the Far East.

By the early part of May, the breach between the British and Persian Governments was complete. The AIOC made a proper request to the Persian Government to submit their differences to arbitration in accordance with the terms of the concession. The Persian Ambassador in London delivered a note to the Foreign Secretary which in the strongest terms rejected the demand for arbitration and suggested that international bodies, such as the Hague Court have no right to interfere in what Persia considers to be a purely domestic matter. London was gravely disturbed by lack of sympathy and moral support from Washington. However, the issues at stake for Britain, the Atlantic Powers and incidentally, Persia were so great that the British Foreign Secretary had drafted a reply to the Persian Note hinting that if the Teheran Government attempted to take over the installations on the petroleum fields or the refinery at Abadan, then the British Government would resist such action by force.

The original stiff draft was however modified in consultation with the United States before presentation to Persia. This change of tone on the part of the British Government was due to American influence. The Americans counselled moderation and the British Government agreed to modify the draft.

In Teheran, security was being precariously maintained since the Persian Prime Minister barricaded himself in the Parliament building, after his quarrel with the fanatical Moslem organisation, Fedayan Islam, whose gunemen was said to lurk around every corner in the Persian capital. This religious terrorist organisation claimed that they helped Mossadeq to power and had not received their due reward in full representation on the Petroleum Commission of eleven men appointed "to take over the effects of the late Company." Thus the two right wing parties were on the point of fighting one another while the intentions of the Communist Tudeh Party were unknown but menacing and the moderate intelligent Persians were remaining outdoors.

By the end of May, British Government admitted the principle of nationalisation; and Mr. Morrison hedged his statement with brackets and qualifications that should go without saying. Simultaneously, the Company had "out of respect to the Persian Government" fallen in with a request to meet its representative and to hear their plans without commenting on them. Further, the British Government had drawn world attention by laying it before the International Court of Justice.

The Persian case in brief is this: Broadly speaking case runs as follows: "This company calls itself Anglo-Iranian, but the title is a piece of window-dressing. It is in fact a British company. Its seat is in London. It has even removed the British director who used to live in Teheran. Why does a half-Iranian company pay to the British treasury, in tax, far more than it pays the Iranian treasury in royalty and tax together? Why does it sell oil to the British Navy at a price it never reveals? How do we know that it has told us exactly how much of our oil it is removing? Why has it for years been paying us less per ton than similar companies pay other Governments, notably those of Saudi Arabia and Venezuela? What we want is a share in the management, or at least a partnership which will guarantee us against exploitation by people who, for all we know, will have bled away our whole wealth by 1993."

In June, 1951 the AIOC agreed to send a mission of four of its directors to Teheran to discuss how to carry out the nationalisation law. Persia meanwhile passed an enactment nationalising the oil concern and appointed a board of directors of the new National Iranian Oil Company.

In the middle of June the AIOC oil delegation arrived at Teheran to conduct negotiations with the Persian Government. The delegation's main task was to find out, while recognising the principle of nationalisation, a state of things into the nationalised organisation where the Company could fit itself into. But unfortunately the talks failed. The Persian demand, according to the AIOC, exceeded this limit and afforded no guarantee of future security.

The Company proposed, as a temporary alternative to the Persian demand for a percentage of the oil revenue, to make an interim payment of £10 million immediately and of £3,000,000 monthly while the future of the industry was under discussion. The Company was also ready to vest its assets in the National Iranian Oil Company, which would grant them to a new mixed company with a number of Persian directors. This suggestion was also turned down by the Persians.

In the third week of June Dr. Mossadeq addressed a letter to President Truman, but the text of the letter was not at all conciliatory. Dr. Mossadeq now threatened the British employees of the Company with penalties ranging up to death, to be imposed by military courts, for the ill-defined crime of "sobatage". The result was the process of shutting down the refinery at Abadan. There was a Parliamentary debate in Britain over the Persian issue. Both the Government and the Opposition agreed that if British lives were in danger, then British forces must be landed to see British nationals to safety. The Conservative party insisted the use of force for the preservation of British property. But this was not accepted by the Labour Government.

In July 1951, the International Court of Justice proposed as "interim measures" that the British and Persians should in effect reconcile their quarrel while the matter is 'sub judice'. To this Dr. Mossadeq denied that the Court had any jurisdiction in the matter. The Persian case that the Court has no jurisdiction is, presumably, based on the fact that when in 1930, it signed the famous "Optional Clause" that gave the old pre-war Court, and gives the new Court, compulsory jurisdiction, it restricted compulsory compliance to international "treaties and conventions". It holds that its concession agreement of 1933 with the AIOC is not international, but domestic in scope, and that it has every right therefore to nationalise its oil. The British do not question the right to nationalise; they question only the right to do so in defiance of the undertaking to resort to arbitration given in 1933. They also contest the Persian argument that no international undertaking is infringed. The Company, Britain contends, is a British national, which is being denied a promised legal remedy. This denial of justice infringes specific international undertakings given by Persia in 1928 to afford foreigners the same treatment as nationals.

As a result of British ineffectiveness, the initiative was left to the Americans to negotiate with the Persians. In view of this stalemate condition in Persia, President Truman sent Mr. Averell Harriman, as his personal representative, to Persia in the middle of July to negotiate with the Persians. Mr. Averrel Harriman persuaded the Persians to resume talks with the British Government.

Due to Mr. Harriman's personal negotiation, a British Mission headed by the then Lord Privy Seal, Mr. Richard Stokes, left for Teheran for negotiation. Meantime, the oil storage tanks at Abadan were full to capacity and the refinery had ceased to function.

On 15th August, Mr. Stokes made the following proposals to Dr. Mossadeq's cabinet: namely, the British offer accepts nationalisation, winds up Anglo-Iranian operations inside Persia, affords the Persian state control of extraction and exploitation of oil, and yields in an adequate financial return as well as a sure market for a period of years to be chosen by Persians. But Hussein Fatemi, Dr. Mossadeq's extremist deputy premier, publicly rejected the proposals. He objected to the clause which prescribes that the oilfields and refinery shall, in order to retain the services of good technicians, operate under "experienced and qualified" (*i.e.* foreign) management.

Dr. Mossadeq's cabinet was divided into section—the extremists and the moderates. The latter wanted some sort of compromise as they realised that Persia could not maintain its present pattern of existence without revenue from oil and that Persians had not yet the training or capacity to extract sufficient revenue for that purpose. But the extremists held that any deviation, even by a little, from the position of the extremist National Front stand might cost him his life.

In September, 1951 Dr. Mossadeq told the Persian Parliament that he was about to present an ultimatum to the British: either they agree to negotiate on his own conditions or he would turn out the British engineers who remained at Abadan. The opposition frustrated this move by refusing to provide a quorum in the Majlis, and it was therefore uncertain when the ultimatum would be sent. However, Dr. Mossadeq issued his ultimatum to Britain on his personal authority and without the sanction of the Majlis. It prescribed negotiation on his terms within fifteen days, or else the expulsion of the 350 British technicians remaining at Abadan. This ultimatum marked the failure of all negotiations with Persia. Britain in response withdrawn some of the facilities she allowed to Persia for her membership of the sterling area. Dr. Mossadeq, without support from Parliament and on his own responsibility, withdrew the residence permits of the British employees of the Oil Company still left at Abadan. And the stern protest made by the British Ambassador in Teheran, coupled with reports that London and Washington were consulting about the action to be taken, merely prompted the Persian Prime Minister to alert his forces in Khuzistan and threaten destruction of the Abadan installations if British forces should land.

In October, British appealed to the Security Council against Persia over the oil dispute. Dr. Mossadeq himself went to Flushing Meadows to defend Persia's action in nationalising the oil concern. It was said that it was a great mistake for Britain to bring this appeal to the Security Council knowing full well that Russia and Jugoslavia would not support her case. And the Americans were said to be so worried by the vision of Persia falling bit by bit to the Russians.

In November, Persian Prime Minister's consultations with American government was fruitless.

Persia was offered American technical, military and economic aid. Dr. Mossadeq rejected the American proposal on ground that the aid would be "attached with strings". However on 1st January, 1952, he was given a week's time by the American Ambassador, Loy Henderson, to decide whether he would take American help and renew the military aid agreement. The USA had a military mission at Persian Army HQ under a military and training aid which expired on Dec. 8. The agreement was not renewed.

The Majlis has fixed January 22 for discussion of the Opposition Leader's censure motion on the Premier. The Opposition leader, Jamal Imami attacking the Premier's oil policy said: "Mossadeq has buried us in a subterranean grave—and is rejoicing in our burial". The opposition thinks that the nationalisation measure has involved in a financial disaster for Persia with her Exchequer running almost empty. Oil was her only main source of earning foreign exchanges, and with the stoppage of oil production, she is in great financial difficulties.

World Bank Proposal—The World Bank told Britain and Persia in December that it would be willing to use its good offices in the crisis if both the governments wanted it to do so. It proposed to send a two men mission to Persia in the fourth week of December to see the oilfields and refinery at first hand. It was hoped the mission would lead to the reopening of the Abadan refinery. The Bank in a letter to the Prime Minister on January 3rd, 1952, outlined the general principles on which work could started at Abadan: 1. The Bank reserves the right to appoint and dismiss the Board management and employees; 2. The Bank's services would be temporary until final settlement with Britain and would not affect the right of either party. 3. The Bank undertakes to provide the money to run Abadan; and 4. Oil will be distributed through existing facilities.

The Persian Prime Minister rejected these proposals. He said that these proposals were not in accordance with the proposals he had received from the Bank while in Washington, and asked for clarification.

Meantime, the Persian Cabinet has decided to invite a Polish trade mission to conclude a barter agreement for Persian oil. The Shah was however reported to have advised the Prime Minister not to jeopardize American friendship and to renew the military agreement with the USA.

Britain was willing to accept the Bank's proposals as a basis for discussion.

VI. EGYPT, BRITAIN AND SUEZ CANAL

In the second week of October, 1951, Egypt struck headlines by declaring that she had abrogated the 1936 Anglo-Egyptian Treaty. Negotiations for a revision of the Anglo-Egyptian Treaty giving Britain the right to station troops on the Suez Canal were started in 1946, suspended and resumed several times. The Egyptian Government has since abrogated the Anglo-Egyptian Treaty of 1899 and has decided to end the joint Anglo-Egyptian rule over Sudan. The King of Egypt was declared to be King of Sudan, although this move was not approved by the Sudanese. Under the condominium agreement of 1899, both Britain and Egypt maintain forces in the Sudan, but the actual administration, finances and police forces are in the British hands.

The Egyptians who opened the Sudan to the outside world in the last century, claim Sudan on grounds of common religion and language, but mostly because the flow of the river Nile, and consequently the fate of the Egyptian agriculture depends upon the control of the flood water in the Sudan. The Egyptian parliamentary decrees abolishing the condominium and placing the Sudan under the Egyptian Crown promise the Sudanese "a special constitution to be drawn up by a constituent assembly, representing the inhabitants of Sudan." The assembly will also draw up a Sudanese electoral law. The King of Egypt will have the right to appoint and dismiss the Sudanese ministers, dissolve parliament and order new elections. The parliament will pass all new legislations and impose or abolish taxes. Foreign affairs, defence and currency problems of Sudan will be in the hands of the Egyptian Government, and in all other matters Sudan will have autonomy.

Under the Anglo-Egyptian Treaty, of 1936, Britain has the right to keep a garrison of 10,000 and 400 airmen in the canal zone until 1956. The British occupied Egypt in 1882 for the sake of the Canal and long after giving Egypt her full independence in 1936, they insisted on keeping troops on Egyptian territory on the same reason, *i.e.,* for the safety of the Suez Canal zone.

The Egyptians contend that the continued occupation of the Egyptian territory by the British under a treaty signed by co-ercion is incompatible with the UN Charter, that British forces in the canal zone exceed the maximum allowed number by at least 30,000 and that in this atomic age, a garrison cannot defend the Suez Canal, particularly if it has no co-operation from neighbouring Arab countries. When the Wafdist Party came to power in 1950, Premier Nahas Pasha promised the Parliament to get the withdrawal of British troops or resign before the beginning of the next parliamentary session in November.

Two waterways cutting the parched Egyptian desert have shaped modern Egypt's political economic and strategic importance in the Middle East—the river Nile and the man-made Suez Canal. Whereas the Nile gave Egypt fertile fields with bumper crops and long-staple cotton and the promises of industrialisation, the Suez Canal gave this country international complications and big power jealousies, ever since Ferdinand de Lesseps, opened it in 1869, 83 years ago.

Immediately after the declaration of abrogation of the Treaty, by Egypt, Britain protested by saying that the Treaty could not be cancelled by unilateral action by Egypt. Mr. Morrison, the then Foreign Secretary of Britain, promised to withdraw troops from the Canal zone, provided Egypt agreed to enter in the international command for the Middle East, a new treaty organisation to be created to meet the changed circumstances. The Middle Eastern defence pact would be an offshoot of NATO, and if Egypt joins the defence pact, then British troops on the Canal would be withdrawn or reduced and replaced with an international force made up of Atlantic and Commonwealth forces. Egypt hinted that she would join such a pact if her national demands are met and she is treated on an equal footing with Greece and Turkey and that Israel is not admitted to the membership of such a pact.

The 99-year Canal concession is held by a French company with headquarters in Paris, but nearly half the shares are held by Britain. In 1968, the Canal will revert to Egyptian ownership. Although nationalist sections have been demanding immediate nationalisation, the Government of Egypt has been reluctant on that score. But now a crisis has been precipitated.

On 9th October, Mr. Herbert Morrison, said that the British Government did not recognise the legality of unilateral denunciation by Egypt of the Treaty of 1936 and Britain intended to maintain the full and entire rights conferred on her by the treaty, and the Anglo-Egyptian Condominium relating to the Sudan.

Riots broke out in the Canal zone where clashes between English and Egyptian troops look place. To prevent further disorders, an aggreement has been reached between, the Egyptian civil governor, and General Erskine, commanding the British troops, for keeping the people in their respective charge out of one another's way in the Suez Canal Zone. Britain took a strong attitude because she has felt that, if the shock caused by the retreat from Persia is not to produce a landslide, treaty rights in Egypt must be maintained and a show of strength is one way to maintain it.

The barometer of Anglo-Egyptians relations is still quivering in the region of stormy weather.

Egypt's Foreign Minister, Salah el Din Pasha, asked the UN on 4th January at Paris if the stationing of British forces in Egypt against the will of the people was in accordance with the principles of the UN Charter. He said that the Middle Eastern Powers refused to be mere pawns in any imperialistic game and aggression in Egypt or attempts to impose a Middle East Command "without taking the Middle East into consideration" could hardly be called contributions to peace and security.

Mr. Eden made a declaration on Sudan in the House of Commons on November 15th and it was an attempt to inject calm into troubled minds of the Sudanese. Mr. Eden's proposal envisages self-government—and, if they want it, independence, for the Sudan at a pace which far outstrips any other practicable arrangement that they or anyone else could make. The declaration abandons all reference to Condominium. It says—"His Majesty's Government considers that the attainment of self-government should immediately be followed by active preparation for the ultimate goal of self-determination."

VII. THE SCHUMAN PLAN TREATY

After nearly a year of ceaseless negotiation, the Treaty which will provide the working basis for the Schuman Plan has been completed and takes its place as one of the most remarkable document yet produced in a world driven by anxiety to seek security in closer international association. The primary impetus for the Schuman plan came from the desire to anchor Germany firmly to the west and prevent it from turning red; but the treaty also reveals that it is potentially an economic and political experiment of very great scope. Of course, it is a grand international cartel with political basis.

The Treaty envisages the aim of the six member nations, France, Germany, Belgium, Luxemburg, Holland and Italy to pool their coal and steel industries by eliminating among themselves the barriers to the free flow of coal and steel, and thus to establish a "single market". The purpose behind the creation of the single market—as expressed in Article 1-5 of the Treaty—is to prevent restrictive practices, to give all consumers equal access to raw materials and goods produced within the area, to promote the rational development of resources and to stimulate expansion and modernisation of plant.

The remaining 90 Articles of the Treaty describe the machinery for translating these objective into practice. It is being said that in the process idealistic principles have become buried in a mass of exceptions to them, and the high authority has acquired alarmingly wide power—an indication that the final result is an ingenious three-cornered compromise between the governments, clinging jealously to their sovereign rights; cautious industrialists seeking refuge from competition in familiar and private device for protecting themselves; and M. Monnet himself, the presiding genious of the Plan, has determined throughout that the High Authority should retain enough powers to prevent the growth of special interests within the area.

Duration of the Plan—The Treaty is to operate for fifty years. Approximately the first six months of its life is to be a preparatory period at the end of which a single market in coal, iron ore and scrap will come into being; two months later steel will follow. During this period the various institutions named in the Treaty will be set up and negotiation will be carried out first with Britain to explore the ways of associating it with the Plan and also of the signatories of the General Agreement on Tariffs and Trade (GATT) and OEEC to secure for the Plan the necessary exemption from the most-favoured nations principle embodied in both these organisations. After the single market is created, five years, known as transition period—will elapse. At the end of this time, the intention is to wipe out most of the subsidies and special aids specifically agreed in the Treaty as measures needed to help the weaker members of the community to adapt to themselves to the rigours of the single market.

VIII. JAPANESE PEACE TREATY MADE AT SAN FRANCISCO

In the San Francisco Conference held between September 4 and 8, a peace treaty with Japan was signed. Russia joined the conference, while India did not join it on ground that the Treaty did not envisage full sovereign status for Japan and for several other causes. By the Treaty, the state of war with Japan will cease on the date the Treaty comes into force. Chapter 2 contains the territorial provisions. Under these, Japan recognises the independence of Korea and renounces all claims to Korean territory, including the islands of Quelpart, Port Hamilton and Dagelet. Japan also renounces all rights to Formosa and the Pescadores, the Kurile Islands, that part of Sakhalin which belonged to Japan since 1905, the Pacific territories governed under the League of Nations mandates by Japan, the Antartic area and the Spratly and Paracel Islands. Disposition of property and settlement of claims and debts in the above territories will be settled between Japan and the authorities to whom the areas have been ceded by special arrangements.

Chapter 3 covers security. Japan conforms to the ideals of non-aggression and peaceful settlement of the UN Charter and conversely the Allied Powers undertake to let their relations with Japan be governed by the principles of Article 2 of that Charter. (Article 2 includes the principle that all members have sovereign equality and that international disputes shall be settled by peaceful means).

Japan's right to individual or collective self-defence under Article 51 of the Charter and to enter into voluntary collective security arrangements is specifically recognised.

All allied occupation forces are to be withdrawn from Japan within 90 days of the coming into force of the Treaty. But this will not prevent the stationing or retention of foreign armed forces on Japanese territory by bilateral or multilateral agreements between Japan and one or more Allied Powers.

Chapter 4 defines procedure for the continuity of pre-war international agreements. Allied Powers are responsible for notifying Japan in the case of bilateral agreements which they wish to revise or keep in force. Where no notification is given, treaties will be regarded as abrogated. Japan recognises all treaties concluded by the Allies for ending World War II; and renounces all special rights and interests in China acquired from the provisions of the final Protocol signed at Peking on Sept. 7, 1901.

She will agree to enter stable and friendly trading and maritime relations with all signatories of the treaty and, for four years after the treaty comes into force, to give most-favoured-nation treatment to these nations. Japan is released from this most-favoured-nation treatment obligation in cases where she does not receive reciprocity from any Allied Power. Article 13 deals with matters relating to international civil air transport agreements.

Reparations: In Chapter 5, the Allies recognise that payment of reparations would cripple the Japanese economy, while recording in principle that she would repair damage and suffering caused by her during the last war. Where an Allied Power desires it, Japan must negotiate with a view to make available Japanese skill and service for the restoration of damage done by her.

She is protected against undue foreign exchange burdens by an undertaking of the Allied Powers to supply raw materials for such reparations work.

Allied Powers are given the right to retain Japanese property in territories for which they are now responsible. Japanese diplomatic and consular properties will normally be returned to her. Japan undertakes to indemnify members of the Allied armed forces who suffered undue hardships as prisoners of war of Japan by transferring her assets and those of her nationals in countries which were neutral during the last war or were at war with any of the Allied Powers. The International Red Cross will use these assets for the benefit of former prisoners of war and their families.

Japan recognises her pre-war debts and will negotiate with creditors on the resumption of payments. Subject to reciprocal action, Japan renounces all war claims including debts against Germany and German nationals.

Chapter 6 relates to settlement of disputes arising from the Japanese peace treaty. Where disputes are not settled by other means, they will be referred for decision to the International Court of Justice, whose jurisdiction Japan binds herself to accept.

The treaty will come into operation after ratification by a majority of the principal signatory Powers including Japan and the USA as the principal occupying power. The other principal powers concerned are Australia, Burma, Canada, Ceylon, France, India, Indonesia, the Netherlands, New Zealand, Pakistan, the Philippines, Britain and Russia. It shall come into force for each state which subsequently ratifies it on the date of deposit of its instrument of ratification. If the required majority has not ratified the treaty, within nine months of Japan's ratification then any state may make the treaty effective between itself and Japan simply by notifying the Japanese and US Governments within three years of the deposit of Japan's ratification.

Japan is permitted to conclude a bilateral treaty of peace "on the same, or substantially the same, terms as provided by the present treaty with any power which signed the UN declaration on January 1, 1942, which is at war with Japan, but which is not a signatory of the present treaty". Japan is virtually left with responsibility of the choice whether to conclude a treaty with the Peking Government or with the KMT. India will conclude a separate peace treaty with Japan in 1952. Soviet Russia did not sign the peace treaty at San Francisco.

The USA-Japanese defence pact: The American-Japanese defence pact, which provides for the stationing of American troops in Japan after the end of the occupation, was signed at San Francisco as soon as the Peace Treaty itself had received the signatures of all the nations at the conference except the States of the Soviet bloc. These troops are to be available not only for the defence of Japan against external aggression, but also on the request of the Japanese Government, for the supression of the internal disturbances due to the instigation or intervention of a foreign power. The American troops will cooperate for these purposes with a Japanese army which according to official forecasts in Tokyo, will consist of eight divisions of 16,000 men each.

IX. KING ABDULLAH OF JORDAN

In July, 1951, King Abdullah was struck down by the cowardly hand of an assassin as he was entering the El Aqsa Mosque in Jersalem. It was the fourth political assassination in a few months to add further complications to the disturbed scene in the Middle East, and it was to be noted that all the four victims were friends of Britain. King Abdullah, whose staunch support of Britain dated from the first world war, when his action was an important factor in bringing about the Revolt in the Desert, had shown himself in recent years in Jordan as a statesman of high calibre. Out of a backward territory of the Ottoman empire, he created, by astute diplomacy and with British help in men and money, a country that has played no mean role in Middle Eastern affairs.

In April 1950 Jordanian Parliament passed a resolution incorporating into the kingdom those areas of Arab Palestine occupied by his Arab Legion during the war with Israel. To this annexation, the late king was far from adverse. But other Arab States strongly protested and in June 1951, Egypt supported by Syria, Lebanon and Saudi Arabia demanded Jordan's expulsion from the Arab League. Secret Jordanian negotiation with Israel was also alleged. An alleged plot to kill King Abdulla at the instance of a member country of the League emerged in November, 1950 during investigations into one of the numerous conspiracies in Syria.

X. PLEVEN PLAN FOR A EUROPEAN ARMY

While the Schuman Plan aims at an economic integration of Europe, the Pleven Plan aims at the military integration of European nations with the creation of a common army. These are just the moves towards Wilkie's One World. The Pleven plan is also a French plan, named after its author. The Pleven plan for a European army consists largely of principles and hardly at all of facts. But the interim report was approved in Paris on 24th July by representatives of France, Germany, Italy, Belgium and Luxemberg. It is an attempt to create a "common supranational political and military authority", under which will serve the armed forces that members set aside for European defence. The Pleven plan and the Council of Europe which are all interlinked and which have the one aim—the elimination of Germany as a free and united force in Europe. Germany politically and economically and strategically will be merged in a greater organisation so that there might not be future aggression.

General Eisenhower needs some fifty divisions for the defence of Western Europe and has discovered no way of making up that number save by getting ten to twelve divisions of German soldier with an adequate tactical force; secondly, the vast majority of Germans do not want to make either this or any other contribution to the common defence until there are sufficient non-German forces on their territory to resist successfully any Russian threat to their security. In other words, Western Europe cannot be defended until the Germans rearm; and the Germans will not rearm until their country is defended. Germany insists on political bargains and concessions for her rearmament.

XI. SINO-TIBETAN TREATY

An agreement for the "peaceful liberation" of Tibet by the Central People's Govrnment of China was signed in Peking on 23rd May. "The agreement followed negotiations between representatives of the Central People's Government and the Tibetan "Regional Government." Under the agreement regional autonomy would be exercised in Tibet. The Tibetan Regional Government would assist the People's Liberation Army in entering Tibet and the Tibetan people would unite in wiping out "imperialistic influences" in the country.

The agreement provides that the existing political and administrative systems in Tibet will remain unchanged. The Dalai Lama, temporal leader of the Tibetans and other high officials would retain their posts and the Panchen Lama, traditional spiritual leader who has lived on Chinese territory since his appointment, would go to Tibet to assume office.

The agreement promised the preservation of Tibetan traditions, customs and religious beliefs, and provided that the lamaseries should continue to manage their own finance. "Tibetan troops will be recognised as part of the Chinese People's Liberation Army in accordance with a unified military system of state." "A Chinese military and administrative commission and military area headquarters will be established in Tibet. The Chinese Government will assist the Tibetan masses in political, economic, cultural and educational construction work, and Chinese aid will also be given in developing industry and commerce."

The agreement stipulates that all Tibetan officials must sever previous relationships with Chinese Nationalists and other imperialists. The Central People's Government shall have the centralised handling of all external affairs of the area of Tibet.

XII. SOUTH AFRICA'S APARTHEID

For some years the Government of South Africa has been pursuing vigorously its racial segregation policy. The world opinion is definitely against South Africa in her policy of apartheid and the UN has also denounced several times her bid to create a White South Africa. Of the Union's population of eleven and a quarter million, the Bantus, the children of the soil, number over seven million, the European settlers—the English and the Boer—over two million, the half caste coloured races—nine lakhs and the Indians—two hundred and eighty-five thousand. More than eighty per cent of the South African Indians are Union citizens and the rest, Indian nationals.

Since the late Field Marshal Smuts laid down unashamedly the principle of racial segregation in the Imperial Conference of 1921, successive Governments in that country, and especially the Government of Malan have been pursuing that policy to its ugliest and abominable end. Smuts said in 1921 Conference: "The whole basis of our particular system in South Africa rests on inequality—it is the bedrock of our Constitution."

South Africa has reduced the Bantus to the position of aliens in the land of their birth, and the Indian settlers to serfdom. Dr. Malan's Government aims at perpetuating white supremacy and reducing all non-whites to social inferiority, political impotence and economic helplessness. The Group Areas Act, 1950, lays down the fullest statutory recognition to the policy of racial segregation or apartheid. Under this Act separate trade and residential areas will be created for each section of the community and names of coloured voters will be removed from the common rolls. The South African Government does not recognise the non-whites as full citizens. A series of laws passed between 1936 and 1950 have banned Indian immigration into the Union, checked the growth and expansion of Indian commerce therein and have deprived them of the right of pursuing a number of trades and professions. Indians, stigmatised as social inferiors to the Europeans, are discriminated against in the social sphere, handicapped in agricultural pursuits and have no right of representation in the legislative bodies of the Union. The Indians have been the worst sufferers in South Africa.

The Group Areas Act, 1950, provides that areas will be marked out for different races which will be allowed to live, to trade and to acquire property in their respective areas only. The Union Government denies fundamental human rights to four-fifths of its population. All non-whites irrespective of their culture and civilisation are branded as inferior to the whites. The Government of Dr. Malan has refused to follow the direction of the UN to stop her policy of apartheid. She has claimed that it is her domestic policy and the UN has no right to interfere with it.

On January 5, 1952, the UN Special Political Committee (*ad hoc*) adopted a resolution condemning South Africa's racial policy. The draft resolution will now go to the General Assembly. The draft resolution calls for some active steps in this regard so as to prevent the apartheid measures being enforced further. Indians in South Africa are making vigorous protests and offering non-violent satyagrahas.

DIRECTORY SECTION

GOVERNOR-GENERALS & VICEROYS IN BRITISH REGIME

Governor-Generals of Bengal

Warren Hastings	1774
Sir John Macpherson	1785
Earl Cornwallis	1786
Sir John Shore	1793
Sir Alfred Clarke	1798
Lord Wellesley	1798
Lord Cornwallis (2nd time)	1805
Sir George Barlow	1805
Earl of Minto I	1807
Lord Hastings (Earl of Moria)	1813
John Adam	1823
Earl of Amherst	1823
W. B. Bayley	1828
Lord W. Cavandish-Bentinck	1828

Governor-General of India

Lord W. Cavandish-Bentinck (2nd time)	1834
Sir Charles Metcalfer	1835
Lord Auckland	1836
Lord Ellenborough	1842
*William W. Bird	1844
Sir Henry Hardinge	1844
Earl of Dalhousie	1848
Lord Canning	1856

Viceroys & Governor-Generals

Lord Canning	1858
Earl of Elgin	1862
*Sir Robert Napier	1863
*Sir William Danison	1863
Sir John Lawrence	1864
Earl of Mayo	1869
*John Strachey	1872
*Lord Napier	1872
Lord Northbrook	1872
Earl of Lytton	1876
Lord Ripon	1880
Earl of Dufferin	1884
Lord Lansdowne	1888
Earl of Elgin	1894
Lord Curzon	1899
*Lord Ampthill	1904
Lord Curzon	1904
Earl of Minto	1905
Lord Hardinge	1910
Lord Chelmsford	1916
Lord Reading	1821
*Earl of Lytton	1925
Lord Irwin	1926
*Viscount Goschen	1929
Earl of Willingdon	1931
*Sir George Stanley	1934
Marquess Linlinthgow	1936
Viscount Wavell	1943
*Sir John Colvile	1945
Viscount Mountbatten	1947

GOVERNOR-GENERALS OF INDIAN UNION

Lord Louis Mountbatten	1947-48
C. Rajagopalachari	1948-49

PRESIDENTS OF THE INDIAN UNION

Dr. Rajendra Prasad	1950-

COMMANDERS-IN-CHIEF, INDIAN ARMY

Lt.-Gen. R. M. MacDonald Lockart	1947
Lt.-Gen. F. R. R. Francis Robert Roy Bucher	1948
General K. M. Cariappa	1949

COMMANDERS-IN-CHIEF, INDIAN NAVY

Rear Admiral J. T. S. Hall	1947
Admiral Sir Edward Parry	1948-51
Vice-Admiral C. T. M. Pizey	1951-

COMMANDERS-IN-CHIEF, I.A.F.

Air Marshal Sir T. Elmhirst.

Air Marshal R. Ivelaw-Chapman.

PROVINCIAL GOVERNORS OF INDIAN UNION

West Bengal

C. Rajagopalachari	1947
Sir B. L. Mitter (*Acting*)	1947
C. Rajagopalachari	1947
Dr. K. N. Katju	1948
Dr. H. C. Mukerjee	1951

Madras

Sir Archibald Edward Nye	1947
Maharaja of Bhavnagar	1948

Assam

Sir Akbar Hydari	1947
F. R. Lodge (*Offg.*)	1948
Sri Prakasa	1949
Jairamdas Daulatram	1950

Punjab

Sir C. Trivedi	1947

Bihar

Jairamdas Daulatram	1950
M. S. Aney	1948

Madhya Pradesh

Mangaldas Pakvasa	1947

Orissa

Dr. K. N. Katju	1947
Asaf Ali	1948
V. P. Menon (*Acting*)	1951
Asaf Ali	1951

Bombay

Sir John Colvile	1947
Raja Sir Maharaj Singh	1948

Uttar Pradesh

Mrs. Sarojini Naidu	1947
Mr. B. Mallik (*Offg.*)	1949
Sir H. P. Mody	1949

* Officiating.

REPUBLIC OF INDIA

President of India—The Hon'ble Dr. Rajendra Prasad.

MEMBERS OF THE COUNCIL OF MINISTERS, CENTRAL GOVERNMENT

Shri Jawaharlal Nehru (*Prime Minister*)—*External Affairs.*

Maulana Abul Kalam Azad—*Education.*

Sardar Baldev Singh—*Defence.*

Shri Jagjivan Ram—*Labour.*

Rajkumari Amrit Kaur—*Health.*

Shri N. V. Gadgil—*Works, Production & Supply.*

Shri N. Gopalaswami Ayyangar—*—Transport, Railways & States.*

Shri Hare Krishna Mahtab—*Commerce & Industry.*

Shri K. M. Munshi—*Food and Agriculture.*

Shri Sri Prakasa—*Natural Resources & Scientific Research.*

Shri Chintaman Dwarkanath Deshmukh—*Finance.*

Sir Gulzarilal Nanda—*Planning.*

Dr. Kailasnath Katju—*Home Affairs & Law.*

MINISTERS OF STATE

Shri C. C. Biswas—*Minorities.*

Shri K. Santhanam—*Transport & Railways.*

Shri R. R. Diwakar—*Information & Broadcasting.*

Shri Satyanarayan Sinha—*Parliamentary Affairs.*

Shri Mahabir Tyagi—*Finance.*

Shri R. K. Sidhwa—*Home Affairs.*

Shri Ajit Prasad Jain—*Rehabilitation.*

DEPUTY MINISTERS

Dr. B. V. Keshkar—*External Affairs.*

Shri D. P. Karmakar—*Commerce & Industry.*

Major General Himmat Sinhji—*Defence.*

Shri S. N. Buragohain—*Works, Production and Supply.*

Shri Thirumal Rao—*Food and Agriculture.*

Shri Raj Bahadur—*Communication.*

SECRETARIES OF THE MINISTRIES OF THE GOVERNMENT OF INDIA

Secretary to President—Sri Shavax A. Lall.

Principal Private Secretary to the Prime Minister—Shri B. N. Kaul.

Cabinet Secretariat—Shri N. R. Pillai.

SECRETARIES OF THE MINISTRIES

Food & Agriculture—Shri Vishnu Sahay, I.C.S.

National Resources & Scientific Research—Dr. S. S. Bhatnagar.

Commerce & Industry—Shri S. A. Venkataraman, I.C.S.

Communications—Shri A. V. Pai, I.C.S.

Defence—Shri H. M. Patel, I.C.S.

Education—Dr. Tara Chand.

External Affairs—Shri Girija Shankar Bajpai, I.C.S. (*Secretary-General*); Shri K. P. S. Menon, I.C.S., (*Foreign Secretary*); Shri S. Dutt (*Commonwealth Secretary*).

Finance (Department of Revenue and Expenditure)—Shri K. R. K. Menon.

Finance (Department of Economic Affairs)—Shri K. G. Ambegaokar, I.C.S. (*Income Tax Investigation*)—Shri H. S. Ramaswami.

Health—Shri P. Madhava Menon, I.C.S., (*Joint Secretary*).

Home Affairs—Shri H. V. R. Iyengar, I.C.S.

Information and Broadcasting—Shri P. C. Chaudhuri, I.C.S.

Labour—Shri V. K. R. Menon.

Law—Shri K. V. K. Sundaram, I.C.S.

Rehabilitation—Shri C. N. Chandra, I.C.S.

States—Shri C. S. Venkatachar.

Transport—Shri Y. N. Sukthankar, I.C.S.

Works, Production & Supply—Shri C. C. Desai.

Railways (*Railway Board*)—Shri Haveli Ram.

TARIFF COMMISSION

Shri G. L. Mehta (*President*).
Mr. B. N. Adarkar.
Dr. B. V. Narayanaswamy Naidu.

AIR TRANSPORT LICENSING BOARD

Mr. K. C. Neogy (*Chairman*).
Mr. T P. Bhalla, *Director-General, Civil Aviation.*
Mr. K. M. Raha, *Deputy-Director-General, Civil Aviation.*

JUDGES OF THE SUPREME COURT OF INDIA

Shri M. Patanjali Sastri, *Chief Judge.*
Shri S. R. Das, .. *Judge.*
Syed Fazl Ali .. ,,
Shri B. K. Mukherjea .. *Judge.*
Shri Chandrasekhara Iyer ,,
Shri Mehr Chand Mahajan .. ,,
Shri Vivian Bose .. ,,

MEMBERS OF THE RAILWAY BOARD

Mr. A. K. Chanda (*Financial Commissioner, Railways*).
Mr. S. S. Vasist (*Transportation*).
Mr. F. C. Badhwar (*Engineering*).
Mr. V. Nilakantan (*Staff*).

UNION PUBLIC SERVICE COMMISSION

Shri R. N. Banerjee, I.C.S., (*Chairman*).
Shri Javad Hussain .. (*Member*)
Shri W. R. Puranik .. „
Shri G. C. Chatterjee .. (*Member*)
Shri N. Govindarajan .. „
Shri C. B. Nagarkar.
Prof. N. K. Siddhanta.

FINANCE COMMISSION

Mr. K. C. Neogy (*Chairman*).
V. P. Menon.
R. Kushalendra Rao.
Dr. B. K. Madan.
V. Raghavachar—*Member Secretary*

IMPORTANT POSTS

Solicitor-General of India—Sri C. K. Daphtary.
Director-General of Civil Aviation—T. P. Bhalla.
Commissioner for Scheduled Castes and Tribes—L. M. Shrikant.
Director General of Archaeology—Sri M. S. Vats.
Director of Anthropology—Dr. B. S. Guha.
Director General of Health Services—Dr. K. C. K. E. Raja.
Director General of Resettlement and Employment—Dr. N. Das.
Comptroller and Auditor General of India—V. Narahari Rao.
Chairman, Central Board of Film Censors—C. M. Agarwalla.
Director General., A. I. R.—Sri N. A. S. Lakshmanan.
Director, Council of Scientific and Industrial Research—Dr. S. S. Bhatnagar.
Director, Geological Survey of India—Dr. M. S. Krishnan.
Director, Zoological Department of India—Dr. S. L. Hora.
Chief Election Commissioner—Sri S. Sen.
Financial Commissioner, Rly. Board—Sri A. K. Chanda.
Director-General of Supplies and Disposals—Sri T. Shivasankar.

INDIAN AMBASSADORS AND OTHER REPRESENTATIVES ABROAD

1. EMBASSIES

Country	*Name*	*Designation and address*
Afghanistan ..	Wing Commander Rup Chand	Ambassador, Kabul.
Austria ..	Dr. N. Raghavan	Minister (has personal rank of Ambassador), Legation of India, 18, Jungfraustrasse, Berne.
Argentina ..	Nawab Ali Yavar Jung Bahadur	Ambassador (*Concurrantly Minister* to Chili).
Belgium & Luxemburg ..	Mr. P. A. Menon, I.C.S.	Ambassador, Belgium and Luxemburg, Embassy of India, 62, Avenue Franklin Roosevelt, Brussels.

Brazil ..	Mr. Vasugar	Ambassador, Embassy of India Rau Barde Flamengo 16-22 Rio de Janeiro.
Burma ..	Dr. M. A. Rauf	Ambassador, Randeria Building, Phayre Street, Rangoon.
China ..	Sardar K. M. Panikkar	Ambassador, 32, Legation St. Peking, China.
Czeohoslovakia	Shri R. Govurdhan	Charge d' Affaires, 22, Thunovake, Prague.
Egypt ..		Ambassador, Cairo (*Also Minister to Lebanon, Jordan and Syria.*
Eire ..	Mr. V. K. Krishna Menon	Ambassador (*Also High Commissioner for India in the U.K.*).
France ..	Sardar H. S. Malik	Ambassador 7, Avenue Kelebar, Paris (*Also Minister to Norway*).
Indonesia ..	Bhagwat Dayal	Ambassador in Indonesia.
Iran ..	Dr. Tara Chand	Ambassador, Avenue Shah Raza, Tehran.
Italy ..		Ambassador, Rome (*Also Ambassador to Yugoslavia*), Embassy of India, Via Lovanio, 24 Roma.
Mexico ..	Mr. B. R. Sen	Ambassador.
Nepal ..	Shri C. P. Narain Singh	Ambassador, Khatmandu.
Netherlands ..	Mr. B. N. Chakravarti	Ambassador, Embassy of India, Buitenrustwag 2 The Hague.
Thailand ..	Sri M. K. Kripalani, I.C.S.	Ambassador, Bangkok.
Turkey ..	Dr. C. S. Jha	3, Ozdemir, Caddesi, Kavakladere, Ankara.
U.S.A. ..	B. R. Sen, I.C.S.	Ambassador, Washington, 2107 Masachusetts Avenue, N. W., Washington, 8 D.C. (*Also Ambassador to Mexico*).
U.S.S.R. ..	Dr. S. Radhakrishnan	Ambassador, Embassy of India, Smolensky, Boulevard 11/2, Moscow.
Yogoslavia ..		Ambassador, Embassy of India, Via Lovanio 24, Rome.

2. LEGATIONS

Iraq ..	Dr. Tara Chand	Envoy Extraordinary and Minister Plenipotentiary, Iraq.
Jordan, Labanon and Syria ..	Mr. A. A. A. Fyzee	Envoy Extraordinary and Minister Plenipotentiary in Jordan. (*Also Ambassador to Egypt*).

Country		Designation and address
Ethiopia	Sardar Sant Singh	Envoy Extraordinary and Minister Plenipotentiary in Ethiopia.
Germany	Maj.-General Prem Krishan	Envoy Extraordinary and Minister Plenipotentiary, Indian Military Mission, Berlin.
Norway	Sardar H. S. Malik	Envoy Extraordinary and Minister Plenipotentiary in Norway.
Sweden, Finland & Denmark	Mr. M. J. Desai, I.C.S.	Envoy Extraordinary and Minister Plenipotentiary in Sweden, Stockholm. (*Also Minister to Finland and Denmark*)
Austria	Shri N. Raghavan	Minister, Legation of India, 18 Jungfranstrasse, Berne.

3. CONSULATES

Country		Designation and address
Switzerland	Shri N. Raghavan	Minister (*also to Switzerland*).
Vatican		Minister and to the Holy See, Berne & Austria Legation of India, 18 Jungfranstrasse, Berne.
French Establishments in India	Mr. R. K. Tandon	Consul-General, Pondicherry. 7, Rue des Capucins, Pondicherry.
Indo-China	Mr. F. M. De Mello Kamath	Consul-General, 213 Rue Catinst, Saigon.
U.N.	Mr. Rajeshwar Dayal	Permanent Representative in the U.N.
Jalalabad	Mr. Narinder Nath	Vice-Consul, Jalalabad.
Jedda (Saudi Arabia)	Mr. M. K. Kidwai	Consul of Jedda, Jedda, Saudi Arabia.
Hanoi	Shri M. Kutty	Consular Agent, 49 Rue de la Chaux, Hanoi.
Kandahar (*Afganistan*)	Sri Ram Chand Kalra	Vice-Consul in Kandahar (*Afghanistan*).
Medan (*Sumatra*)	Shri Jagat Singh	Consul, P.B. 266, 4B, Manggalsan, Medan (Indonesia).
Philippines	Shri P. R. S. Mani	Consul-General in Phillipuines, Manila.
Shanghai	Shri A. K. Sen	Vice Consul-General, The Bund, Shanghai (China).
Zahidan		Vice-Consul in Zahidan.

San Francisco ..	Shri M. R. Ahuja	Consul-General, 25, Beale St. San Francisco 5.

4. MISSIONS

Japan	.. Shri K. K. Chettur	Head of the Indian Liaison Mission, Empire House, 5th Floor, Marunochi, Criyodaku, Tokyo.
Sikkim & Bhutan	.. Shri H. Dayal	Political Officer in Sikkim, Gangtok.
Tibet	.. Dr. S. Sinha	Officer-in-charge, Indian Mission, Lhasa, P.O. Gyantse (Tibet).
Malaya	.. Shri Gopala Menon	Representative of Government of India, India House, 31, Grange Road, Singapore.

6. AGENCIES

Ceylon	.. Shri P. S. Menon	Agent of the Govt. of India, Parandeniya Road, Kendy.
Malaya	.. Shri S. G. Ramchandran	Agent of the Govt. of India, Oriental Building, 11, Floor, Kaula Lumpur.
Gyantse	.. Capt. S. M. Krishnatry	Ind. Trade Agent, Gyantse (Tibet).
Yatung	.. Sonam Tobden Kazi	Ind. Trade Agent, Yatung (Tibet).
Gartok	.. Shri Lakshman Singh	Ind. Trade Agent, Gartok (West Tibet).

7. HIGH COMMISSIONERS & OTHER REPRESENTATIVES

Malaya	.. Shri Gopala Menon	Representative for India in Malaya, 98, Robinson Road, P.O. Box No. 836, Singapore
Pakistan	.. Dr. Mohan Sinha Mehta	High Commissioner, Damodar Mahal, Karachi.
	Mr. Khub Chand	Deputy High Commissioner, Karachi.
	Mr. S. K. Banerjee	Deputy High Commissioner 94, Upper Mall, Lahore.
	Shri B. K. Acharya, I.C.S.	Deputy High Commissioner, for India, Dacca.
South Africa ..	Shri R. T. Chari	Secretary to the High Commissioner, Union of South Africa, Johannesburg, (Shifts to Cape Town every year from January to June).
U.K.	.. Mr. V. K. Krishna Menon	High Commissioner for India, India House, Aldwych, W.C. 2, London. (*Also Ambassador of India to Eire*).

8. COMMISSIONS

British East Africa (also Tribal areas, Nayasaland, N. & S. Rodesia)	Shri Apa B. Pant	Commissioner for Govt. of India, Govt. Road, P.B. 2274 Nairobi, (Kenya).
British West Africa (including Br. Guiana)	Shri A. M. Sahay	Commissioner for Govt. of India, 67, Queen St., Port of Spain, Trinidad, B.W.I.
Fiji	Shri A. K. Sen	Commissioner for India, B. V. Building, Waimann Road, Suva.
Mauritius	Shri J. A. Thivy	Commissioner for India, Edith Cavell St., Port Louis, Mauritious.
Aden	Shri A. B. Thadani	Commissioner for India, Aden.

INDIAN GOVERNMENT TRADE REPRESENTATIVES

Place	*Name and Address*	*Sphere of Activities*
	Europe.	
London	Shri Dharam Vira, Commercial Adviser to the High Commissioner for India "India House", Aldwych, London, W.C. 2.	United Kingdom and Eire.
Paris	Shri M. P. Mathur, Commercial Secy. to the Indian Embassy, 15, Rue Alfred Dehodencq, Paris XVI eme.	France and Norway.
Berne	Shri M. A. Vellodi, Commercial Secy. to the Legation of India, 18, Jungfraustrasse, Berne (Switzerland).	Switzerland.
Rome	Shri S. S. Bajpai, Commercial Councillor to the Embassy of India, Via Lovanio 24 Rome.	Italy, Greece and Yugoslavia.
Berlin	Shri B. P. Adarkar, Commercial Councillor to the Legation of India in Germany, 262, Koblenzer Strasse, Bonn, Germany.	Germany.

Vienna ..	Shri K. V. Ramaswamy, Indian Vice-Consul cum Attache tion of India, 69 Strenwartestrasse, Vienna VIII, Austria.	Austria.

America

New York ..	Sri A. S. Lall, Consul-General for India, 3 East 64th Street, New York, 21, N.Y.	East United States of America and Cuba.
San Francisco	Shri M. R. Ahuja, Consul-General for India, 25, Beale Street, San Francisco, California.	West U.S.A.
Buenos Aires	Shri V. C. Vijaya Raghvan, Commercial Second Secy. to Indian Embassy, Avenide Popue Saenz Pena 628, Buenos Aires (Argentina).	Argentine, Bolvia, Chile, Paraguay & Uruguay.

Africa

Mombasa ..	Mr. S. V. Patel, Indian Govt. Trade Commissioner, "Africa House", Kilindini Road, P. Box No. 614, Mombasa, (Kenya).	East Africa (Kenya, Uganda and Tanganyika), Zanzibar, Belgian Congo, Northern Rhodesia, Southern Rhodesia, British, French and Italian Somaliland & Nyasaland.
Alexandria ..	Shri Ratnam, Commercial Secretary to the Embassy of India and Ind. Government Trade Commissioner, Al Bassir Building No. 5 Rue Adib Bey, Issac, Avenue dela Reine Nazli, Alexandria (Egypt).	Syria, Egypt, Transjordan, Eritria, Lebanon & Cyprus.

Australia

Sydney ..	Dr. T. G. Menon, Prudential Building, 39-49, Martin Place, Sydney, Australia.	Australia.
Wellington ..	Shri B. Sanyal, Indian Government Trade Commissioner, 49, Willis St., Wellington.	New Zealand.

Asia

Tokyo ..	Shri V. C. Trivedi, First Secy. to the Indian Liaison Mission, Empire House (Naigal Building) Marunouchi, Tokyo, Japan.	Japan.

Colombo	..	Shri B. K. Masand, Secretary (Commercial) to the High Commissioner for India in Ceylon, Fort, Colombo.	Ceylon.
Rangoon	..	Shri H. N. Vibhakar, Commercial Secy. to Indian Embassy, Randeria Building, Phayre St., Rangoon.	Burma.
Karachi	..	Shri H. R. Shivdasami, IC.S., Indian Govt. Trade Commr., Chartered Bank Chambers, Valika Mahal, N. J. Setna Road, New Town, Karachi.	Pakistan.
Dacca	..	Shri P. Das Gupta, Asst. Indian Govt. Trade Commissioner, 8, Gopi Krishna Lane P.O. Wari, Dacca.	East Pakistan.
Singapore	..	Shri Jogindra Singh, Indian Govt. Trade Commissioner, India House, Singapore.	Hongkong & Malaya
Manila	..	Shri P. R. S. Mani, Indian Consul General, 509-511 Burke Building, Escolta, Manila.	Philippines.
Djakarta	..	Sri S. Krishnamurti, First Secy. 21, Merdeka Utara, Djakarta.	Republic of Indonesia.
Aden	..	Shri A. B. Thadani, Commissioner of the Govt. of India, Aden.	Aden.
Bangkok	..	Shri S. K. Roy, First Secretary (Commercial) to the Legation of India, Bangkok.	Thailand.

DIPLOMATIC REPRESENTATIVES IN INDIA

Country		*Designation*	*Name*
Afghanistan	..	Ambassador Extraordinary & Plenipotentiary	H. E. Sirdar Najibullah Khan.
Argentina	..	Charge d' Affaires	Col. Rafael Lascal.
Belgium	..	Ambassador Extraordinary.. & Plenipitentiary	H. E. Stephan Hallot.
Brazil	..	Do.	H. E. Senhor Caiode Mello Franco.
Burma	..	Do.	H. E. Maha Thrya Sithu U. Kyin.
China	..	Do.	General Yuan Chunghsien.
Cuba	..		Senhor Luis F. de Almagro.

Country		*Name*
Czechoslovakia	Ambassador	H. E. Dr. B. Kratochirl.
Egypt	Ambassador Extraordinary & Plenipotentiary	H. E. Mons. Ismail Kamel Bey.
France	Do.	H. E. Count Marie Joseph Ostrorog
Hungary	Charge d' Affaires	M. Szarka.
Indonesia	Do.	H. E. Dr. Soedarsono.
Jordan	Do.	Farhan Bey Shubaylat.
Iran	Do.	H. E. Mr. Mussa Noury Esfandiary.
Italy	Ambassador	Signor Sydney Prina Ricotti.
Nepal	Ambassador Extraordinary & Plenipotentiary	H. E. Major Genl. Bijoy Shumshere Jung Bahadur Rana.
Netherlands	Do.	H. E. A. M. L. Winkelman
Turkey	Do.	H. E. M. Ali Turgeldi.
U.S.A.	Do.	H. E. Mr. Chester Bowles.
U.S.S.R.	Do.	H. E. Monsieur Kiril V. Novikov.
Yugoslavia	Ambassador	H. E. Josip Gjergja.
Australia	High Commissioner	H. E. Mr. H. R. Gollan.
Canada	Do.	H. E. Mr. W. F. Chipman
Ceylon	Do.	H. E. Mr. C. Coomaraswamy.
Pakistan	Do.	H. E. Khan Bahadur Mohammad Ismail.
United Kingdom	Do.	H. E. Lieut.-General Sir Archibald Nye.
Austria	Charge d' Affaires	Dr. Carl Pereira.
Chile	Do.	Dr. Juan Marin.
Denmark	Envoy Extraordinary and Minister Plenipotentiary	Mons. Toyberg Frandzen.
Ethiopia	Do.	H. E. Ato Emmanuel Abraham.
Finland	Do.	H. E. Mons. Hugo Valvanne.
Holy See	Apostolio Internuncio	H. E. The Most Revd. Leo Peter Kierkels.
Iraq	Envoy Extraordinary and Minister Plenipotentiary	H. E. Mons. Mohammad Salim Al-Radhi.
Mexico	Ambassador	H. E. Emilo Portesgill.
Norway	Do.	H. E. Monsieur Jens Schive.
Portugal	Do.	H. E. Dr. Vasco Vieira Garin.
Sweden	Do.	H. E. Gustav A. Wijkman.

Switzerland ..	Do.	H. E. Dr. Armin Daeniker.
Syria ..	Do.	H. E. Dr. Naguib Armanazi.
Thailand ..	Do.	H. E. Vadhana Isarabhakti.
Yugoslavia ..	Ambassador	Jose Vilfan.

TRADE REPRESENTATIVES OF OVERSEAS GOVERNMENTS IN INDIA

United Kingdom ..	U. K. Senior Trade Commissioner in India, Eastern House, Man Singh Road, New Delhi. U. K. Trade Commissioner in India, Mercantile Bank Building, Mahatma Gandhi Road, Bombay U. K. Trade Commissioner in India, 1, Harrington Street, Calcutta. U. K. Trade Commissioner in India, Rutland Gate, Numgahbakkam, Madras 6.
U.S.A. ..	Counsellor for Economic Affairs, American Embassy, Bhawalpur House, New Delhi.
Canada ..	Commercial Secretary for Canada, Gresham Assurance House, Mint Road, Bombay. Commercial Secretary, Office of the High Commissioner for Canada, 4, Aurangzeb Road, New Delhi.
Australia ..	Australian Government Trade Commissioner in India, Mercantile Bank Building, Mahatma Gandhi Road, Bombay. Australian Government Trade Commissioner in India, 2, Fairlie Place, Calcutta.
New Zealand ..	New Zealand Government Trade Commissioner in India, 2nd Floor, Mercantile Bank Building, Mahatma Gandhi Road, Bombay.
Ceylon ..	Trade Commissioner for Ceylon in India, Ceylon House, Bruce St., Bombay.
Switzerland ..	Swiss Trade Commissioner for India, Burma and Ceylon, Gresham Assurance House, Sir Pheroze Shah Mehta Road, Bombay.
Iran (Persia) ..	Trade Commissioner for Iran in India, Dorchester Flat 4, H, Queens Road, Fort, Bombay.
Netherlands & Netherland East Indies ..	Commercial Counsellor, Royal Netherlands Embassy (Economic Section), City Ice Building, 288, Bazar Gate Street, Fort, Bombay.
U.S.S.R. ..	Trade Agent of the U.S.S.R. in India 4, Camac Street, Calcutta.

STATE MINISTERS

ASSAM

Shri Bishnuram Medhi (*Chief Minister*).
Rev. J. J. M. Nicholas Roy
Shri Ram Nath Das.
Shri Rupnath Brahma
Maulvi Abdul Matlib Mazumdar
Shri Omeo Kumar Das
Shri Moti Ram Borah
Shri Mahendra Mohan Choudhury.

Deputy Ministers

Shri Hareswar Das.
Shri Purnandu Chetia.

BIHAR

Dr. Shri Krishna Sinha. (*Chief Minister*).
Dr. Anugraha Narayan Sinha.
Dr. Syed Mahmud.
Shri Juglal Choudhury.
Shri Ram Charitar Singh.
Shri Badrinath Verma.
Shri Krishna Ballabh Sahay.
Shri Binodanand Jha.
Shri Abdul Qaiyum Ansari

BOMBAY

Shri B. G. Kher, (*Chief Minister*).
Shri Morarji Desai.
Dr. M. D. D. Gilder.
Shri Dinkarrao N. Desai
Shri V. L. Mehta.
Shri L. M. Patil
Shri M. P. Patil
Shri G. D. Vertek.
Shri G. Tapase.
Dr. Jivraj Mehta.
Shri Maloji Rao Nimbalkar.

HYDERABAD

Shri M. K. Vellodi, (*Chief Minister*).
Shri M. Seshadri.
Shri C. V. S. Rao.
Nawab Zain Yar Junj Bahadur.
Shri B. Rama Krishna Rao.
Shri Phoolchand Gandhi.
Shri Vinayakrao Koratkar Vidyalankar.
Shri V. B. Raju.

JAMMU AND KASHMIR

Sheikh Mohammad Abdullah, (*Chief Minister*).
Gulam Mohammad Bakshi.
Shri G. M. Sadiq.
Shri M. A. Beg.
Shri Shamlal Saraf.
Pandit Girdharilal Dogra.
Col. Peer Mohammad Khan.
Shri D. P. Dhar.

MADHYA BHARAT

Shri Takhatmal Jain. (*Chief Minister*).
Shri Mishrilal Gangwal.
Shri Jagmohanlal Shrivastava.
Shri Manoharsingh Mehta.
Shri Shyamlal Pandviya.
Dr. Prem Singh Rathor.

Deputy Ministers

Janab Syed Hamid Ali.
Shri Sunnulal.

MADHYA PRADESH

Pandit Ravi Shankar Shukla. (*Chief Minister*).
Shri D. K. Mehta.
Shri S. V. Gokhale.
Shri W. S. Barlingay.
Shri R. Agniboy.
Shri P. K. Deshmukh.
Shri G. N. Kale.
Shri A. M. Makade.

MADRAS

Shri P. S. Kumara Swami Raja. (*Chief Minister*).
Shri Kala Venkata Rao.
Shri M. Bhaktavatsalam.
Shri B. Gopala Reddi.
Shri K. Madhava Menon.
Shri H. Sitarama Reddi.
Shri A. B. Shetty.
Shri K. Chandramouli.
Shri B. Parameswaram.
Shri Perumalswami Reddiar.
Shri J. L. Roche-Victoria.

MYSORE

Shri K. C. Reddi, (*Chief Minister*).
Shri H. C. Dasappa.
Shri K. T. Bhashyam.
Shri H. Siddaiya.
Shri T. Mariappa.
Shri R. Chennigaramiah.

ORISSA

Shri Naba Krushna Choudhury, (*Chief Minister*).
Shri Nityananda Kanungo.
Pandit Lingraj Misra.
Shri Lall Ranjit Singh Bariha.
Shri Sadasiva Tripathy.
Shri Rajkrishna Bose.
Shri Pabitra Mohan Pradhan.
Shri Kaileshwar Prasad Nanda.

P.E.P.S.U.

Col. Raghubir Singh, (*Chief Minister*).
Shri Brish Bhan.
Gyani Zail Singh.
Shri Nihal Singh Takshak.
Shri Des Raj.
Sardar Tirath Singh.
Sardar Saurpuran Singh.

Deputy Ministers

Shri Har Charan Singh.
Shri Roshan Lall.

PUNJAB[1]

[1] The Punjab Ministry resigned on June 16, 1951 and the President of India assumed all the executive functions of the State on June 20, 1951.

RAJASTHAN[2]

Shri Jai Narayan Vyas. (*Chief Minister*).
Shri Tikaram Paliwal.
Shri Mathura Das Mathur.
Shri Kumbha Ram Arya.
Shri Brij Sunder Sharma.
Shri Jugal Kishore Chaturvedi.
Shri Balwant Singh Mehta.
Shri Mohanlal Sukhadia.
Shri Norattam Lal Joshi.
Kanwar Jaswant Singh.
Shri Amrit Lal Yadar.

---

[2] The Rajasthan Ministry was formed on April 26, 1951.

SAURASHTRA

Shri U. N. Dhebar.
(*Chief Minister*).
Shri Daya Shankar Dave.
Shri Rasikbhai Parikh.
Shri Girdharbhai Kotak.
Shri Manubhai Shah.

TRAVANCORE-COCHIN

Shri G. Keshavan.
(*Chief Minister*).
Shri T. K. Narayana Pillai.
Shri A. J. John.

UTTAR PRADESH

Pandit Govind Ballabh Pant.
(*Chief Minister*).
Hafiz Mohammad Ibrahim.
Shri Sampurnanand.
Shri Hukum Singh.
Syed Ali Zahir.
Shri Girdhari Lal.
Shri A. G. Kher.
Shri Chandra Bhan Gupta.
Shri Har Govind Singh.
Chowdhuri Charan Singh.

WEST BENGAL

Dr. Bidhan Chandra Roy.
(*Chief Minister*).
Shri Nalini Ranjan Sarkar.
Shri Harendra Nath Chaudhuri.
Shri P. C. Sen.
Shri J. N. Panja.
Shri Bimal Chandra Sinha.
Shri Nikunja Behari Maity.
Shri N. Dutt-Mazumdar.
Shri Kalipada Mukherjee.
Shri Bhupati Majumdar.
Shri Hem Chandra Naskar.
Shri Shyama P. Barman.
Dr. R. Ahmed.

NATIONAL INCOME: (1948-49)

Population		341·04 milns.
Net national income	Rs.	8,710 crores
Per capita income	„	255
Net domestic product at factor cost	„	8,730 crores
Net national product at market prices	„	9,170 crores
Net output per engaged person in Agriculture ..	„	500
Mining and Factory establishments	„	1,700
Small enterprises	„	600
Commerce, transport and communications ..	„	1,600
Professions (including miscellaneous services) ..	„	600
Government services (administration)	„	1,300
Domestic service	„	400
Net output of		
Government enterprises	„	300 crores
Government administration	„	460 „
Private sector	„	7,970 „
Government share in national expenditure	„	840 „
Government draft on private income	„	690 „

WHO'S WHO IN INDIA

Abdullah, Sheikh Mohammad, M.SC.—b. Dec. 5, 1905 near Srinagar; graduated from Lahore and M.Sc. from Aligarh University in 1930; school master under Kashmir Government; came in the public life in 1930; First started Muslim Conference with religious and communal outlook which he turned into National Conference in 1938; was sent to jail several times notably in 1946 for *'quit Kashmir'* agitation and released in 1947; President of the All-India States Peoples' Conference; became head of the Emergency Administration of Kashmir during Muslim tribal raid on Kashmir in 1947; successfully rallied Kashmir against the Pakistani invaders; appointed Prime Minister of Kashmir in 1948; Member of the Indian Parliament for Kashmir; popularly known as *Sher-i-Kashmir.*

Ahmed, Sir Syed Sultan, K.C.S.I.—born 1880; called to the Bar 1905; Govt. Advocate, Patna; Judge, Patna High Court, 1919-20; Vice-Chancellor, Patna University, 1929-30; member, Governor's Executive Council, Bihar and Orissa, 1932; member, Viceroy's Executive Council 1937; 1941 to 1945; was Legal Adviser to the Chamber of Princes, 1945-47.

Aiyer Sir C. P. Ramaswami, K.C.I.E., K.C.S.I., C.I.E.—born, 12th Nov. 1879; joined Madras Bar in 1903; Member of Madras Corporation 1911; General Secretary of the Congress, 1917-18; Advocate-General of Madras Government 1923-1928; Member of the R.T.C.; Law Member of Government of India; 1931 & 1942; Member of the Council of State, 1930; Vice-Chancellor, Travancore University, 1937; Dewan of Travancore, 1936-1947. Delegate to East & West Philosophy Conference, Honolulu, 1949.

Aiyar, Alladi Krishnaswami—b. 1883; educated at Christian College and Law College, Madras, joined Madras High Court in 1907; Advocate-General of Madras 1929-1944; member, Madras University Senate;; member, Indian Parliament.

Ali, His Excellency Mr. M. Asaf—Bar-at-Law—born 1888, educated at St. Stephen's College Delhi; called to Bar in 1912; took part in the Khilafat agitation 1919; joined non-co-operation movement 1920; arrested in 1921 and sentenced to one and half year's imprisonment; again imprisoned during civil disobedience movement 1930; Deputy Leader of the Congress Party in the Central Assembly; member of the Central Assembly 1935-1946; again imprisoned during August revolution and released in 1946; was member Congress Working Committee; member for Transport & Railways in Interim Government 1946-47; India's first Ambassador to U.S.A., 1947-48; now Governor of Orissa since June 1948.

Ali, Sir Saiyid Fazl, Bar-at-Law—born 1886; educated at Banaras, Allahabad and Middle Temple, London; Advocate, Patna upto 1924; Judge, Patna High Court and its Chief Justice 1938; Chairman, R.I.N. Mutiny Enquiry Commission, 1946; India's delegate to U.N. 1947; Judge, Federal Court of India 1947; Judge of the Supreme Court from 1950.

Ali Zahir, Syed –born 1897; educated at Allahabad and Oxford; called to the Bar (Middle Temple) in 1921; General Secretary, All Parties Shia Conference; member U. P. Legislative Assembly 1937-

46; Member, Lucknow University Court; Member, Lucknow Municipal Board; Law Member, Interim Central Government, 1946; India's Ambassador to Persia, 1947-50; Minister, U. P. Government, 1950.

Ambedkar, Dr. Bhimrao Ramji, M.A., Ph.D., D.SC., Bar-at-Law—b. 1893; Educated at Satara, Bombay; Gaekwar's scholar at Columbia University; Professor, Sydenham College of Commerce, 1917; called to Bar, 1923; Founder of the Depressed Classes Institute; nominated member of the Bombay Legislative Council, 1926; member R.T.C. 1930-32 and joint Parliamentary Committee, 1932; member, Viceroy's Executive Council, (*Labour*) 1942-46; Minister of Law, Government of India, from 1947-51; Successfully piloted Constitution of India through the Constituent Assembly in 1949.

Anthony, Frank Reginald, B.A., Bar-at-Law—born Sept. 25, 1908 and educated at Nagpur University; Bar-at-Law; President of the Anglo-Indian and Domiciled European Association; Practised law in Madhya Pradesh; member, Jabbalpur Municipality; member, Central Assembly 1942-45; Member, Sapru Conciliation Committee 1945; member, National Defence Council 1942-45; member, Central Pay Commission 1945; Member, Commonwealth Parliamentary Delegation to England, 1948.

Aney, His Excellency, Madho Srihari, M.A., B.L.—born August 29, 1880; educated at Moris College, Nagpur; joined Bar 1908; thrice member, Legislative Assembly C. P. and Berar; joined C. D. movement, 1930 and suffered imprisonment; member, Congress Working Committee, 1924-25 and 1931-34; President, Berar P.C.C. 1920-30; was a prominent member of the Congress Nationalist Party and Hindu Mahasabha; Acting President of the Congress 1933; started All-India Hindu League; member, Viceroy's Executive Council, 1841-43; India's Representative in Ceylon upto 1947; member, Constituent Assembly of India, 1947-48; Governor of Bihar from Jan. 1948.

Anand, Dr. Mulk Raj, B.A., Ph.D.—b. Dec. 12, 1905; educated at the Punjab, London and Cambridge Universities; won research scholarship and studied philosophy in London and Cambridge; writer and art critic; broadcaster, B.B.C.; won fame as writer of novels *'Colie'* and *'Untouchable'*; was film-script-writer at the British Ministry of Information; now editor of *Marg*, famous art Journal.

Ansari, Hon. Mr. Abdul Qaiyum—Minister, Public Works, Cottage Industries, Backward Muslims' Welfare, Relief and Rehabilitation, Bihar Government, since 1946; President, All-India Momin Conference; Vice-President, All-India Handloom Weavers' Congress; b. 1905 at Dehri-on-Sone; Educated Aligarh Muslim, Calcutta and Allahabad Universities; joined Khilafat and Non-co-operation movements, 1920; imprisoned 1922; edited several Urdu newspapers; joined Momin movement and formulated political demands of Momin community; Pres. Bihar Provincial Momin Jamiat 1938-47; was Member, Advisory Committee on Fundamental Rights, Minorities and Excluded & Tribal Areas, Constituent Assembly of India; Fellow, Patna University; first Momin to be a Fellow of a University and a Minister in India; Address; Patna and Dehri-on-Sone (Bihar).

Ayyangar, N. Gopalaswami, B.A., B.L.—born 31st March 1882; Educated at Presidency and Law Colleges, Madras; entered Madras Civil Service, 1905; Collector and

Dt. Magistrate, 1905-1931; member, Indian Legislative Assembly 1927; Inspector of Municipal Councils & Local Boards 1931-32; Secretary, to Madras Government P. W. Dept., 1932-34; member, Board of Revenue, Madras, 1935-37; Prime Minister of Kashmir 1937-43; member, Council of State; 1943-47; Chairman of the Committee for Indianization of Indian Armed Forces 1947; member of the Indian Constituent Assembly; Minister of India without portfolio 1947-48; leader of the Indian delegation to U.N. 1948; Minister of Transport and Railways Govt. of India since Sept., 1948.

Azad, Maulana Abul Kalam—b. in Mecca 1889 and came to India in 1898; educated in theology in famous Al-Azhar University, Cairo; started famous Urdu paper *Al Hilal* in Calcutta for supporting Congress cause; interned by Br. Government at Ranchi 1914; met Mahatma Gandhi in 1921 and became one of his stunchest supporters; took a leading part in Khilafat movement and also joined the Congress under Gandhiji's leadership; president, special session of the Congress, Delhi, 1923 1939-46; member of the Congress Working Committee; imprisoned in 1942 under D. I. Rules and released in 1945; conducted negotiations with the British Cabinet Mission on behalf of the Congress in 1946; member, Constituent Assembly, 1947; member, Interim Government 1947; Education Minister, Govt. of India since August, 1947.

Bajpai, Sir Girija Shankar, K.C.S.I., C.I.E., I.C.S.—born April 3, 1891; educated at Allahabad & Merton College, Oxford and topped the list of successful I.C.S. candidates; joined I.C.S. in 1915; Secretary, Govt of India in Education Dept.; was on deputation to Canada, Australia and New Zealand to investigate the status of Indians there 1922; Secretary to Indian Deputation to South Africa, 1925-26; Private Secretary to Indian Delegation to Geneva, 1929-30. Jt. Secy. to Indian Delegation to R.T.C.; Secretary, Education Department 1927-29; member, Viceroy's Executive Council, 1935-36 and 1940-41; Agent-General for India to U.S.A. 1941-46; Charge d' Affaires, Indian Embassy in Washington 1946-47; India's Representative on the Council of U.N.R.R.A. 1941-46; now Secretary-General, Ministry of External Affairs, India since 1947.

Bhavanagar, Maharaja of; Commodore H. H. Maharaja Shri Sir Krishna Kumar Sinhji Bhavsinhji, K.C.S.I.—born May 19, 1912; educated at Harrow; succeeded to the Gadi on July 17, 1919; invested with full ruling powers on April 18, 1931; His state along with other States joined together to form Union of Saurashtra; was Rajpramukh of Saurashtra, 1948; now Governor of Madras from 1948.

Bhabha, Dr. Homi Jehangir, Ph.D. (Cantab), F.R.S.—Born October, 30, 1909; educated at Bombay and Cambridge; took mathematical Tripos there; was awarded the Rouse-Ball travelling studentship in mathematics in 1932; worked under famous Prof. E. Fermi in 1933-34 in Rome and under Prof. H. H. Kramer in Utrecht; was awarded Isaac Newton Studentship, 1934; lectured at Cambridge on Cosmic Radiation, Nuclear Physics; Prof. Bangalore Indian Institute of Science on Cosmic rays 1942-45; Chairman, Atomic Energy Board, Government of India; now Director, Fundamental Research Institute, Bombay; elected F.R.S. in 1941; President, Indian Science Congress, 1951.

Birla, Ghanshyamdas —b. 1894 in Jaipur State; Managing Director of Birla Bros. Ltd.; owns cotton mills, sugar mills, zamindari, etc. all over India; was member of the Legislative Assembly; President, Indian Chamber of Commerce, Calcutta, 1924; and of the Federation of Indian Chamberc of Commerce 1929; member of the Indian Fiscal Commission on Labour, 1930; Delegate to the I.L.O. at Geneva, 1927; member of Second R.T.C.; Chairman, All-India Harijan Sevak Sangh.

Bhatnagar, Sir Santi Swarupa, O.B.E., D.SC. (London.), F.R.S.—born 1895; educated at Lahore, Berlin and London; received D.Sc. (Lond.), 1921; Professor of Chemistry, Hindu University, 1921-24; Prof. Punjab Univ. 1924-40; Director of the Board and Council of Scientific & Industrial Research, 1940; President. Ind. Science Congress 1945; Secretary, Ministry of Education, 1947; fellow of the Royal Society 1943; member, Indian Scientific mission to England & U.S.A. 1945; now Director, Industrial & Scientific Research and Secy. Govt. of India, Ministry of National Research.

Bhargava, Dr. Gopichand—born March, 1890; educated at Lahore, entered politics under Lala Lajpat Rai; Member, Punjab Legislative Council 1927-29; jailed for non-co-operation movement 1942-43; member, Punjab Legislative Assembly, 1937 and leader of the opposition again in 1946; was member of the Punjab Partition Committee; Trustee, Village Industries Association, Prime Minister of Punjab 1947-49.

Bose, Nandalal –born 3rd Dec., 1883; passed Entrance Examination and joined Calcutta Govt. School of Arts where he completed the prescribed course; came under the influence of Dr. Abanindranath Tagore while at Govt. Art School; Served apprenticeship under the master for several years; joined Santiniketan School of Tagore in 1914; is now director of Kalabhavan, Santiniketan since 1919; travelled Far East, China, Japan with Poet Tagore in 1944; decorated Congress pandals and exhibitions many times; is the most representative exponent of Indian Art.

Bose, Satyendranath, M.SC.—born Jan. 1, 1894; educated at Presidency College, Calcutta graduated in 1913; received his M.Sc., degree 1915 topping the list; became lecturer in the Department of Physics, Calcutta University; appointed Reader in Physics, Dacca University and later became the Head of the Department for several years; now Khaira Professor of Physics, Calcutta University; President of the Post-graduate Council, Cal. University; General President, Indian Science Congress, 1944; was Chairman of the National Institute of Sciences, India 1948-50; has made valuable contribution to various fields of science including theoretical physics, mathematics, chemistry, statistics, minerology and soil science; The Bose-Einstein Statistics is his greatest contribution to theoretical science. It was translated and elaborated by Prof. Einstein which changed the outlook on the problems of statistical behaviour of physical systems.

Cariappa, General K. M. —born Jan. 28, 1900 in Mercara, Coorg; educated in the Central High School, Mercara and Presidency College, Madras; was among the first batch of Indian Cadets to be commissioned from Daly College, Indore, 1919; was with 1/17th Rajputs in Waziristan 1922-25; was the first Indian officer to enter the Staff College, Quetta 1933; was appointed Deputy Assistant Quartermaster-General, Deccan District 1938; served with the 10th Indian Division in Iraq, Syria and Iran 1941-1942; became Lt.-Col. in 1942 and commanded a machine gun battalion of the 7th Rajputs, thus becoming the first Indian to command a battalion; appointed Assistant Adjutant and Quartermaster-General, Eastern Army 1943; member of the Army Reorganisation Committee 1944; visited England in 1946 as one of the first two Indian students at the Imperial Defence College; promoted to the rank of Major-General 1947; was Chief of General Staff for a brief period 1947; appointed G.O.C.-in-Chief, Eastern Command 1947; raised to the rank of Lt.-General 1947; appointed G.O.C.-in-Chief D. E. P. Command in 1948; decorated with the Legion of Merit by U.S. Government, the highest award which can be bestowed by U.S. on a citizen of another country in 1949; now Commander-in-Chief of the Indian Army and Chief of the Army Staff, 1948.

Chand, Dr. Tara, M.A., D.PHIL. (Oxon.)—born 1888; educated at Delhi, Meerut, Allahabad and Oxford; Professor, Kayastha Pathsala, Allahabad; Professor of Politics, Allahabad University, 1945-47; Vice-Chancellor, Allahabad University 1947; Secretary and Educational Adviser, Ministry of Education, Government of India since 1948.

Chandrasekhar, S. Dr. F.R.S.—born 19th Oct. 1910; educated at Presidency College, Madras; took M.A. D.Sc. of the Cambridge University, 1930; Ph.D. from Cambridge, 1933; fellow, Trinity College, Cambridge, 1933-1937; professor at the Yarkes Observatory, U.S.A.; D.Sc. of the Cambridge University, 1942; lectured at Harvard Observatory; is considered one of the world's leading authorities in mathematical astrophysics; appointed Russel Lecturer, 1949, U.S.A.—the highest honour of the American Astronomical Society; has produced volumes on most intricate aspects of mathematical astronomy: fellow of the Royal Society, 1944.

Chamanlal, Dewan—born 1892 and educated in London and Oxford; was assistant editor of *Bombay Chronicle;* member, Central Legislative Assembly, 1923-1941; member, Punjab Legislative Assembly, 1937 and 1946; member, Central Assembly, 1946; Adviser to Workers' Delegate to the I.L.O. Conference at Geneva 1925; Labour Delegate to I.L.O. Conference Bureau, 1932; one of the founders of the A.I.T.U.C.; member of the Royal Commission on Labour in India, 1929-31; President of the Federation of Posts and Telegraph Union; Leader of the Indian Food Delegation to Argentina; delegate to I.L.O. Conference at Montreal, 1946; was member of the Constituent Assembly; was Indian Ambassador to Turkey.

Chagla, Mr. Justice Mohamed Ali Currim, B.A., (Oxon.)—born 30th Sept. 1900; educated at Bombay and Oxford; called to Bar (Inner Temple) 1922; Professor, Govt. Law College, Bombay 1927-30; Vice-Chancellor, Bombay University 1947; Govt. of India delegate to U. N. 1947; Judge, Bombay High Court 1941-47; now Chief Justice of Bombay High Court from 1947.

Chatterjee, Sir Atul, K.C.S.I., K.C.I.E., G.C.I.E., I.C.S. (Retd.)—born 24 Nov., 1874; stood first in I.C.S. Exam. 1897; was High Commissioner for India 1925-31; represented Govt. of India on many important occasions, notably at the

International Labour Conference at Washington and London Naval Conference; was the Leader of the Indian Delegation to the Imperial Conference at Ottawa, 1932; was Adviser of the Secretary of State for India 1942.

Chaudhuri, Maj.-Gen. J. N.—O.B.E. born June 10, 1908; educated at Calcutta, London and Royal Military College, Sandhurst; received Commission 1928; Commander, 16th Light Cavalry in Burma during World War II; attended Imperial Defence College, London, 1947; officiated as Chief of the General Staff; Military Governor, Hyderabad State upto 1949; now officer Commanding 1st Armoured Division, Indian Army.

Chattopadhyaya, Harindranath—born 1898; brother of the Sarojini Naidu; educated at Hyderabad, Deccan; well-known as a poet, playwright; has travelled extensively throughout Europe and America; has acquired specialised knowledge on theatre and stage-craft; is a disciple of Sri Aurobindo; visited Russia as representative of Indian artists and authors, 1951; author of following books—*Feast of Youth; Perfume of Earth, Gray Clouds, etc.*

Chetty, Sir R. K. Sanmukham, K.C.I.E.—born Oct. 17, 1892; Educated at Madras Christian College; member, Madras Legislative Council, 1920; member, Legislative Assembly, 1923-34; visited Australia as a delegate to the Empire Parliamentary Association 1926; adviser to Indian Employers' delegate at I.L.O. 1932, delegate to Ottawa Economic Conference, 1932; member, Central Government Retrenchment Committee 1930; Dy. President, Central Assembly 1931; President of the Legislative Assembly, 1933; Dewan of Cochin, 1955; Head of the Govt. of India Supply Mission in America 1941-42; Govt. of India's delegate to Bretton Woods Monetary Conference 1944; President, Ind. Tariff Board 1945-1947; Finance Minister of Indian Union, 1947-48.

Chandravarkar, Sir V. N., B.A. (Cantab); Bar-at-Law—b. 1887, son of Sir N. G. Chandravarkar; educated at Bombay and Cambridge; member, Bombay Municipal Corporation, 1926-39; Mayor of Bombay, 1932-33; Chairman, Bombay Millowners' Association, for eight times and also for 1950; Vice-Chancellor, Bombay University, 1938-39; President, Liberal Federation, 1940; member, Council of Indian Institute of Science, Bangalore.

Chopra, Lt.-Col. Sir R. N., C.I.E., M.A., M.D., F.R.C.P., (Lond.)—born 1882; educated at Punjab and Cambridge Universities and then London; joined I.M.S. in 1908; Director of the School of Tropical Medicine, Calcutta, 1935-41; has attained international fame by his researches in tropical diseases; president, Indian Drugs Enquiry Committee 1930-31; Director, Medical Services, Kashmir State; is responsible for starting of Bio-Assay Laboratory in Calcutta for laying down standards in medicines; was the Honorary Physician to the King 1935-39; President, Indian Science Congress, 1947; Chairman, Indigenous Systems of Medicine Committee; is now Director of Drug Research Laboratory, Kashmir.

Das Gupta, Satish Chandra—Born 1882;; began his career as Superintendent of Bengal Chemical & Pharmaceutical Works, Calcutta, left the service and joined non-co-operation movement; started *Khadi Pratisthan* for the development of cottage industries and khadi work and achieved signal success; has devoted entirely to the constructive side of Congress programme; imprisoned several times.

Daulatram, Jairamdas, The Hon. Shri—b. 1892 at Hyderabad, Sind; Graduated in law 1915; took part in non-co-operation movement, 1919; member, A.I.C.C. for several years; Editor, *Hindu* (Karachi), 1921; General Secy., Hindu Mahasabha, 1925-27; Editor *Hindustan Times*, Delhi, 1925-26; Member, Bombay Legislative Council, 1926-29; General Secretary, Indian National Congress, 1931-34; Member, Congress Working Committee 1928-41; imprisoned four times during political movement 1930-34; was Member of the Indian Constituent Assembly; Governor of Bihar, 1947; was Minister of Food and Agriculture, Government of India; now Governor of Assam.

Dalmia, Seth Ramkrishna—Born April 7, 1898; is one of the biggest of industrialists of India! started in Dalmianagar (Dehri-on-Sone) many factories for producing cement, paper, sugar, chemicals, etc.; is a great philanthropist; was the head of the Dalmia-Jain group consisting of numerous chain of companies which include banks, insurance Co., newspapers, paper mills, cement companies, sugar mills, colleries, aviation companies, cotton mills, etc., etc., has endowed many charitable trusts.

Devi, Kamala—born 1903, Mangalore; educated in Madras and London School of Economics; general secretary of the All-India Women's Conference, 1926-30; Prseident, All-India Women's Conference, 1944-45; married Harindranath Chattopadhyaya, the poet and brother of Mrs. Sarojini Naidu; a gifted speaker; entered Congress, 1923; imprisoned four times owing to Congress activities; First woman to contest Legislative Council election in India, 1926; prominent member of the Socialist Party; went on world tour, 1930-41; member, Congress Working Committee, 1946-47.

Dey, Hirendralal, M.A. (CAL.), D.SC. (ECON.); born Nov. 1896; educated at Presidency College, Calcutta and School of Economics London; Lecturer, Lucknow University 1921-33; Head of the Dept. of Economics, Dacca University, 1936-45; now President of the Indian Tariff Commission.

✓ **Deshmukh, Sir Chintamon,** C.I.E.—b. Jan. 14, 1896; educated Bombay, Cambridge and entered I.C.S. in 1919 and received his early administrative training in Madhya Pradesh; one of the secretaries of Second R. T. Conference, 1931; Revenue and Finance Secretary of Madhya Pradesh for 6 yeares; Jt. Secretary, Govt. of India Education, Health and Lands 1939; Secy., Reserve Bank of India 1939-41; Dy. Governor, Reserve Bank of India, 1941-43; Governor, Reserve Bank of India 1943-49; India's delegate to World Monetary Conference, 1944; Chairman, International Monetary Fund, and International Bank 1950; Finance Minister, Govt. of India from 1950; Member, Indian Planning Commission.

Diwakar, R. R.—Born Sept. 30, 1894; educated in Belgaum and Hubli; graduated from Fergusson College, Poona, 1916; graduated in Law, 1921; joined non-co-operation movement in 1921 and sentenced for two years; Editor of *Nava Sakti* in 1923; again convicted for sedition for two years; Secretary of the Karnatak Provincial Congress Committee, 1926-29; President of the Provincial Congress Committee upto 1930-34; sentenced for Salt Satyagraha in 1930; again convicted for sedition in 1934; Editor of the *Samyukta Karnatak;* arrested during individual C. D. Movement, 1940-41;

arrested during 'Quit India' movement and detained till July, 1945; member of the Constituent Assembly, 1946; delegate to the 37th Session of the Inter-Parliamentary Union Conference, Rome, 1948; now Minister of State in-charge, Information and Broadcasting, Government of India, 1948.

Dupleepsinhji, Prince K. S.—b. 1905; educated at Cheltenham College and Clare College, Cambridge; was Cambridge Cricket and Racquets Blue; captained Sussex Country Cricket team 1931-32; has played in Test matches for England against Australia, South Africa and New Zealand; has travelled extensively in Europe, U.S.A. and Australia; has served in various administrative capacities in Nawanagar State; now High Commissioner for India in Australia from 1950.

Dutt, Rajni Palme—b. 1896; educated Balliol College, Oxford; Secy. International Research Dept. 1919-22; Executive member of the same 1921-26; Editor "*Worker's Weekly*" 1921-26; Editor, "*Labour Monthly*" since 1921; one of the greatest living authorities on Marxism; Author of '*Labour International Handbook*," "*Modern India*," *World Politics*," 1918-36; Vice-Chairman, Communist Party, England; visited India in 1946.

Das, K. C.—Born, 1916; Graduated from Presidency College, 1937; Took up Banking under the guidance of his father late J. C. Das, the executive Director of United Bank of India Ltd., Director of Calcutta Insurance Ltd., Bengal Central Building Society Ltd., and Indian Pioneers' Co. Ltd.

Dattta, B. K.—Born 1909; Graduated from Calcutta University College, 1930; Took up Banking as career in 1930; started New Standard Bank Ltd., which was afterwards amalgamated with Comilla Banking Corporation Ltd.; Took leading part in the amalgamation of 4 leading Bengali Banks; now the General Manager of United Bank of India Ltd.

Gadgil, N. V.—B.A., LL.B.—born 10th Jan. 1896 at Malargarh, Central India; educated at Poona and Baroda; graduated in 1918 with honours in Economics and Politics; was member and Vice-President of the Poona Municipality; Secretary, Poona D. C. C. and Bombay P.C.C.; President, Bombay P.C.C. for seven years; member A.I.C.C. since 1925; Whip & General Secretary, Congress Party in the Central Assembly till 1947; suffered imprisonment for eight years for Congress work; now Minister of Works, Mines and Power, Government of India.

Gandhi, Devadas—b. May 22, 1900; son of Mahatma Gandhi; educated at Gurukul and Santinekatan, Bolpur; began his career as journalist; imprisoned several times; twice president of the Indian & Eastern Newspaper Society and All-India Newspaper Editors' Conference for three times; Director on Reuters' Board; now Managing Director, *Hindusthan Times*, Delhi.

Ghose, Sir Jnan Chandra, D.SC.—b. 1894: had a distinguished career at Calcutta and London Universities: Professor of Chemistry, Cal. University 1915-21; Head of the Chemistry Department of Dacca University, 1921-39; has made notable contributions to science in the field of electrochemistry, theory of salt solutions and mechanism of chemical reactions specially under the influence of radiation; member of the Imperial Council of Agricultural Research; member of the governing boy of the Indian Research Fund Association 1935-39; President, Ind. Science Congress, 1939; was Director, Science Institute, Bangalore; now Director-General of Industries and Supplies, India.

Ghose, Dr. Prafulla Chandra—Comes from Malikanda, Dacca; passed B.A., with 1st class honours in chemistry, 1913; M.A., in 1916; First Indian to be appointed Deputy Assay Master, Calcutta Mint, 1920; gave up the service to join non-co-operation movement, 1921; had been in jails number of times in 1920, 1930, 1932, 1933 and 1934; member of the Congress Working Committee 1939-50 was again imprisoned in 1940 and 1942; was one of the founders of Abhoy Ashram, well-known for constructive work in East Bengal; Prime Minister of W. Bengal, 1947-48; left Congress and founded Krishak Majdur Party which ultimately merged into Kripalani's Krishak Majdur Praja Party.

Giri V. V.—educated at Berhampore (Ganjam) and Dublin; practised law in Ganjam before being elected president of the B. N. R. Indian Labour Union; represented All-India Trade Union Congress at I.L.O. in Geneva 1926; represented labour in R.T.C. 1930-31; member, Madras Legislative Assembly, 1937; minister of Labour and Industries, Madras Govt., 1937; again minister of Madras Government 1946 which he resigned; was General Secretary & President of the All-India Railwaymen's Federation; twice President of the All-India Trade Union Congress; was India's High Commissioner to Ceylon upto 1950.

Govind Das, Seth—Born 1896; joined non-co-operation movement in 1919; suffered imprisonment for 7 years for Congress independence movement; President, Mahakoshal P.C.C.; member Central Assembly 1923, 1924 & 1945; visited South and East Africa in 1937 in connection with the status of Indians; President of the Hindi Sahitya Sammelan 1948; has written 84 plays in Hindi; member, Indian Parliament.

Ghuznavi, Sir Abdul Halim Abul Hussein Khan, Kt. (1935)—Landlord and Merchant; Born Nov. 11, 1876; Member, Indian Legislative Assembly, 1926-1946; Delegate to all the three Round Table Conferences, London 1930-33; Delegate, Joint Parliamentary Committee, 1933; Member Court, University of Aligarh; Fellow Calcutta University; President, Central National Muhammadan Association, Calcutta; Member, Royal Asiatic Society; Chairman, Trustees of Indian Museum, Calcutta; Member, Governing Body, I. M. M. T. S. *"Dufferin"*; President Muslim Chamber of Commerce, Calcutta 1939-40; Sheriff of Calcutta, 1934-35; Knighthood, 1935; Member, Constituent Assembly of India; President, Indian Chamber of Commerce, Calcutta; 1945-46; Chairman and Director of many industrial and insurance organization, President, Academy of Fine Arts, etc., member, Royal Calcutta Turf Club; New Delhi Aero Club and Gymkhana Club; Residence; 18, Canal St., Intally, P.O. Calcutta.

Guha, Dr. B. S., M.A. PH.D.; born August 15, 1894; educated at Calcutta and Harvard; Anthropologist, Zoological Survey of India 1927-45; Lecturer, Physical Anthropology, Cal. Univ. 1926-27; Director, Department of Anthropology and Anthropological Adviser to the Government of India.

Habibulla, Sir Muhammad, K.C.S.I., K.C.I.E., LL.D.—born, 1869; joined bar in 1888; member, Legislative Council, Madras 1909-12; Commissioner, Madras Corporation, 1910; temporary member, Madras Executive Council, 1919; twice member of the Executive Council of Madras; member for Education in Viceroy's Executive Council, 1925-30; leader, Indian Delegation to South Africa in 1926; leader of the Indian Delegation to the League of Nations, 1929; Dewan of Travancore, 1934.

Ismail, Sir Mirza M.—born October 23, 1883; educated at the Madras University; Private Secretary to the Maharaja of Mysore, 1922; Dewan of Mysore 1926-1941; member, R.T.C. 1930, 1931 and 1932; Leader of the Indian Delegation, Inter-Governmental Conference of Far Eastern Countries on Rural Hygiene, Java; Prime Minister, Jaipur 1942-46; Prime Minister of Hyderabad 1946-47; was resident representative of the United Nations in Indonesia, 1951 which he resigned.

Jay Prakash Narain—born in the Saran district of Bihar; left for America in 1922, and stayed there for nearly eight years and studied at five different Universities; returned to India in 1929, and was placed in charge of Labour Research Department of the Congress; General Secretary of the Congress 1930-32; was imprisoned for C.D. movement; formed Congress Socialist Party in 1934; was imprisoned in 1939 under D. I. Act and released in 1946; member, Congress Working Committee, 1946-47.

Jayakar, Mukund Ramrao, Dr., Bar-at-Law, LL.D., D.C.L., P.C.—Educated at Bombay University; entered Bombay Legislative Council, 1923, and became leader of the Swaraj Party in the Central Assembly; broke away from the Congress; played a prominent part to bring peace between the Congress and the Government in June 1930 but failed; Member, Central Legislative Assembly 1926-30; a member of the R.T.C. and Joint Select Committee, 1933; Judge, Federal Court of India, 1937; received LL.D. from Oxford, 1938; was Member of Judicial Committee of the Privy Council; Vice-Chancellor, Poona University, 1949.

Jagjivan Ram—B.SC., born April, 1908; educated at Banaras and Calcutta Universities; Secretary, Bihar Harijan Sangha 1938; General Secretary, All-India Depressed Classes League till 1936 and President 1936-46; suffered imprisonment for participating in Congress movements 1940 and 1942; Secretary, Bihar Provincial Congress Committee till June 1946; Parliamentary Secretary of the Congress Ministry 1937-39; Minister of the Congress Government in Bihar 1946; Labour Member, Interim Central Government 1947; Leader, Indian Delegation to I.L.O. Conference 1947; Minister of Labour, Government of India since 1946.

Jha, Amarnath, Dr., M.A., D.LITT (Hons.);—born 25th Feb., 1897; Prof. of All. Univ. 1930; Vice-Chairman, Allahabad Municipality; President, All-India Educational Conference 1941; Chairman, Public Service Commission, U.P.; Fellow of the Royal Society of Literature; a Vice-President of the Poetry Society; Fellow of the Royal Society of Arts; was Vice-Chancellor of the Allahabad University; Vice-Chancellor of Hindu University for several years

Joshi, N. M.—born 1879; educated at Poona; was member of the Legislative Assembly; a prominent member of the Servants of India Society; member of Bombay Corporation, 1919-23; represented Labour in the Legislative Assembly for several years; member of the Royal Commission on Labour, 1929-31; member of the R.T.C. 1930-32; represented India in the International Labour Conference at Geneva on many occasions; general secretary, I.N.T.U.C., 1940.

Joshi, P. C., M.A., LL.B.—born 1907; joined communist movement when in college; convicted in Meerut Conspiracy Case for 5 years; secretary of the communist party 1937-38; edited the party weekly *National Front,* 1937-39; started party's new organ *People's War* (1942-45) which name was changed to *People Age* after the end of war; due to difference of opinion was expelled from the party but again taken in.

Jain, Ajit Prasad, M.A., LL.B.—born May 2, 1902; educated at Lucknow University, Member U.P. Legislative Assembly 1937-38; member of the A.I.C.C., 1931-35 & 1946; member, Constituent Assembly 1946-50; Parliamentary Secretary, U.P., 1937-39; suffered imprisonment for participating in Congress movements 1921, 1930-32, 1940 and 1942; has travelled extensively in Europe; now Dy. Minister for rehabilitation, Government of India.

Kamath, Hari Vishnu, B.SC.—born July 13, 1907; educated at Madras University; passed I.C.S. and remained in service 1930-38; resigned and joined Congress; Secretary, National Planning Committee; joined Forward Bloc; served several terms of imprisonment 1940-45; member, Constituent Assembly, 1946-50; member of the Indian Parliament.

Kabir, Humayun, M.A. (CAL. & OXON.)—b. Feb. 22, 1906; educated at Calcutta & Oxford Universities; was professor of Calcutta and Andhra Universities; Leader, Peasants Party, Bengal Legisla tive Council; member, Ind. Ry. Enquiry Committee, 1947; Author of numerous books; now Jt. Secretary, Ministry of Education, Government of India since 1948.

Katial, Dr.—Graduated in medicine from Punjab University, 1922; joined I.M.S.; was posted to the Middle and Near East where he spent 4½ years in Iraq, Syria, Egypt; settled in England as doctor in Finsbury 1927; elected member of the Finsbury Borough Council; Mayor of Finsbury 1938; was made honorary Freeman of the Finsbury Borough: now Director of the State Employees Health Insurance Scheme of the Government of India.

Karve, Prof. D. K.—born in April 18, 1858; founder of Hindu Widow's Home and Indian Women's University at Poona; became professor of Fergusson College at Poona; founded Widow Marriage Association; ultimately started India Women's University which was inaugurated in 1916.

Kidwai, Rafi Ahmed—born 1894; educated at M.A.O. College, Aligarh; a zemindar of Barabanki; actively participated in all the Congress movements since 1921; was associated with Pandit Motilal Nehru; was a member of the Central Assembly and was its Congress Whip; was President of U. P. Provincial Congress Committee; was President of the U. P. Congress Parliamentary Board; Congress Minister of the Province 1937-39 and again in 1946; Minister of Transport and Communications, Govt. of India upto 1951.

Kaur, Rajkumari Amrit—born Feb. 2, 1889; daughter of late Raja Sir Harnam Singh of Kapurthala; educated at Sharborne School, Dorsetshire and London; a keen sportswoman and as a tennis player; won many championships; one of the pioneers of the women's movement in India; was one the sponsors of All-India Women's Conference; Chairwoman, A. I. W. C. 1931-33 and 1938; member, Board of Trustees, All-India

Spinners Association for some years; was arrested and detained in 1942; has represented India in several international conferences; member of the Indian delegation to U. N. S. C. O., 1945 and 1946 and of the W.H.O.; Trustee, Gandhi Memorial Fund; now Minister of Health, Government of India.

Khurshed Lal, M.A., LL.D.—b. 4th March 1903; Educated at Lucknow Univ. (Economics), LL.B. 1926; Advocate High Court, Allahabad; awarded gold medal at the All-India college debate, Banaras; Joined Bar at Dehra Dun 1926; Courted imprisonment several times 1932, 1941 and 1942; Chairman, Municipal Board, Dehra Dun 1936-40; Member, Constituent Assembly in 1946; now Deputy Minister, Communications, Govt. of India.

Katju, Dr. Kailash Nath, M.A., LL.D. —Born 17th June, 1887; joined Allahabad High Court as advocate 1914; obtained LL.D. of Allahabad University, 1919; Chairman of the Allahabad Municipal Board, 1925-27; Minister under Congress Government 1937-39; member, All India Congress Committee; was imprisoned in 1930 for Civil Disobedience Movement and again detained under D.I.R. 1942-43; Minister, U. P. Government 1946-47; author of several law books; Governor of Orissa, 1947-48; Governor of West Bengal 1948-51; Home Minister, Central Govt from 1951.

Keshkar, Dr. Balkrishna Viswanath, D.Litt (Paris)—Deputy Minister of External Affairs and Commonwealth Relations, Govt. of India; born 1903 at Poona; educated at Hyderabad (Deccan); joined non-co-operation movement in 1921; was lecturer of Kashi Vidyapith 1927-1930; Educated at Paris 1933-1939 where he got Doctorate in 1935 from Paris University; Secreatry to the Foreign Dept. of the Congress, 1940; joined non-co-operation movement in 1921; was sentenced to imprisonment in 1930, 1931 and 1943; detained during individual civil disobedience movement 1941-42; joined the August revolution in 1942 as underground worker; General Secretary of the Congress 1946-47; Constituent Assembly from U.P. 1948; was the delegate of the Inter-Parliamentary Union, Rome 1948.

Kumaraswami Raja, The Hon. Sri—Entered politics in 1917; has been member of the Madras Legislative Assembly since 1937; Minister for Agriculture in the Prakasam Ministry 1946-47; member of the Central Assembly 1934; is a member of the Tamil Nad Congress; member of the A.I.C.C.; participated in the non-co-operation movement and suffered imprisonment; now Premier of the Madras.

Kunzru, Pandit Hridyanath, LL.D. —born 1887; educated at Allahabad University and London; joined Servants of India Society 1909; member, U. P. Legislative Council, 1921-23; member, Central Assembly 1927-30; President, National Liberal Federation 1934; member of the Council of State 1937-47; President of the Servants of India Society; member Constituent Assembly of India; Chairman, National Cadet Corps Committee, 1946-47; Delegates to the Pacific Relations Conference, U.S.A., 1945.

Kripalani, Acharya J. B., M.A.—born Hyderabad (Sind) 1888. Educated at Wilson College, Bombay, Ferguson College, Poona; Professor of History, Muzaffarpur College, Bihar; Prof. Banaras Hindu University 1919-20; Imprisoned for participating in Congress movements 1917, 1921, 1930, 1932-34 and 1942-46; Principal, Gujrat Vidyapith 1923-28; member Congress Working Committee and General Secretary A.I.C.C. 1934-46; President A.I.C.C. 1940-47; member Hindustani Talimi Sangh, Wardha; President of the Congress 1946-47; Left Congress in 1951 and formed Krishak Proja Majdur Party.

Kher, B. G.—born at Ratnagiri August 24, 1888; educated at Poona and Wilson College, Bombay; passed law examination in 1908; became solicitor 1918; toured Europe and America in 1912; became personal secretary to Mr. Justice Beaman; joined politics in 1932; conducted salt Satyagraha in 1932 and convicted under Ordinance in 1937; Ex-President, Harijan Sevak Sangh; President, All-India Childrens' Association, Prime Minister, Congress Government, Bombay 1937-39 and again Prime Minister from 1946.

Krishnan, Dr. M. S., F.R.S.—born in 1898; Educated from Presidency College, Madras, 1919; undertook post-graduate training and research at the Imperial College of Science and Technology and was awarded Ph.D (London) 1924; joined Geological Survey of India; Lecturer, Forest College, Dehra Dun 1927-29; was a part-time professor of geography, Presidency College, Calcutta 1933-35; made special study of rare minerals for the investigation of the radio-active and other strategic minerals; Director of the India Bureau of Mines 1948-50; Director General of Survey from 1951.

Lal, Shamaldhari—born Oct. 4, 1894; educated at Calcutta University and Exeter College, Oxford; entered I.C.S. in 1919; Divisional Magistrate and Collector Bihar and Orissa 1920; Under-Secretary to the Government of India, Industries and Labour Department 1924-1927; Jt-Secretary to Royal Commission on Labour 1929; Director of Industries and Labour and Secretary to the Government of Bihar and Orissa; Deputy High Commissioner for India in London 1938-1944; Jt.-Secretary, Government of India, Labour Department and Ministry of Labour; Leader of the Indian Delegation to I.L.O. at Montreal 1946; Government delegate for I.L.O. in 1947 and 1948; Chairman of the Governing Body of the I.L.O.; elected Chairman of the I.L.O. in Geneva in 1948.

Lohia, Dr. Rammonohar—b. 1910; educated at Berlin where he took Ph.D. degree; Prominent member of the Socialist Party; was Secretary, Foreign Department of the Congress; imprisoned two years anti-war propaganda.

Menon, V. K. Krishna—born 3rd, May, 1897; educated at Madras and London; Councillor, St. Pancras, London; Special representative Govt. of India, 1946-47; noted author, journalist and publicist; first editor of Pelican Books; has written numerous tracts and books dealing with India; Secretary, India League 1929-47; also its President; Indian delegate to U.N.O. 1946; special Representative of the Government of India 1946-47; now High Commissioner of India in London from 1947.

Masani, M. R., B.A., LL.B.—born Nov. 20, 1905; educated at Elphinstone College, Bombay and London School of Economics, London; Advocate of Bombay High Court; a founder of the Congress Socialist Party; member, Bombay Corporation, 1935-45, Mayor of Bombay 1943-44; Secretary, Public Relations Department of Tata Sons Ltd., 1948-49; member, the Central Assembly, 1945-47; Indian Ambassador to Brazil, 1948-49; member, Indian Constituent

Assembly; Author of many books such as *India's Constitution at Work, Our India, Your Food, Picture of a Plan.*

Malik, Hardit Singh—Educated at Oxford; entered I.C.S. in 1922; Deputy Trade Commissioner, London 1931-1934; Indian Trade Commissioner, London 1934; Joint Secretary, Government of India; Indian Trade Commissioner, New York 1938; Prime Minister of Patiala State 1944; represented India at several International Conferences; High Commissioner for India in Canada 1937-49; Indian Ambassador in Paris from 1949.

Mahmud, Dr. Syed—born 1889; Bar-at-Law and Ph.D.; educated at Aligarh, Cambridge and Germany; joined Congress in 1921; convicted for sedition; Secretary to the Central Khilafat Committee 1921-26; General Secretary to the Congress 1923 and 1930-36; served another term of imprisonment in 1930: ex-member, Congress Working Committee; Education Minister, Bihar under Congress Government 1937-39 and also from 1946-52.

Mahtab Sri Harekrishna — born Jan. 1900; educated at Ravenshaw College, Cuttack; joined non-co-operation movement in 1920; Chairman, Balasore Dist. Board 1924-28; member, B. & O. Legislative Council 1924; Editor, *Prajatantra* and *Rachana;* joined C. D. movement, 1930 & 1932; member, Congress Working Committee, 1938-46; now Prime Minister of Orissa from 1946.

Mathai, Dr. John, D.SC. (Lond.)—born Jan. 10, 1886; educated at Madras, London School of Economics and Oxford; D.Sc. (Lond.); Officer on Special Duty, Co-operative Department, Madras 1918-20; Professor of Economics, Presidency College, Madras 1922-25; member, Madras Legislative Council, 1922-25; member, Indian Tariff Board 1925-31; President of the Tariff Board 1931-35; Director-General, Commercial Intelligence and Statistics 1935-40; joined the Tatas 1940 and its Director 1944; member for Finance, Government of India, 1946; Minister for Industry and Supply 1946-47; Minister of Transport & Railways 1947-48; Minister of Finance 1949-50; joined the Tatas in 1950.

Mira Behn—born Nov. 22, 1892; daughter of a British Admiral; joined Mahatma Gandhi Ashram, and became his closest follower; convicted several times for C. D. movement; Started her own Ashram, 1946; Adviser to U.P. Government from 1947-50 for development work.

Munshi, Mrs. Lilavati—b. 1889; A leading Congress woman, a keen social worker; was an elected member both of Bombay Assembly and Bombay Corporation; an authoress of repute with a record of national, social and benevolent services; wife of Mr. K. M. Munshi, Food Minister of the Central Government.

Mehta, Dr. Jivraj, M.D. (LOND.) M.R.C.P. (LOND.)—b. 1887; educated at Baroda, Bombay and London; Chief Medical Officer, Baroda; President, Indian Medical Association for several years; member, Medical Council of India 1938-43; Fellow, University of Bombay; arrested & imprisoned in 1932-33 and 1942-44 under D. I. Act; Director-General, of Health Services of India, 1948; Prime Minister, Baroda State, 1948; now Minister of the Government of Bombay.

Mehta, Mrs. Hansa—b. July 3, 1897; educated at Baroda; married to Dr. Jivraj Mehta; President B.P.C.C., 1930; Fellow, Bombay University Senate 1931-1947; member, Bombay Legislative Council for several years; Vice-President, All-India Women's Conference for several years; President, All-India Women's Conference 1945-46; represented India in several International Conferences; was a member of the U. N. Sub-Commission on the status of women 1946; member of the Human Rights Commission of U. N. 1947 and 1948; Delegate to the Commonwealth Parliamentary Conference 1948; author of numerous books; now Vice-Chancellor, Baroda University.

Mehta, Gaganvihari Lal, M.A.—born April 15, 1900; educated at Bombay and London School of Economics; Assistant Editor of the *Bombay Chronicle* 1923-25; President, Federation of Indian Chambers of Commerce, 1942-43; member, Central Advisory Board of Education 1943-47; Commissioner of the Port of Calcutta for several years; member, All-India Council of Technical Education, 1945; President of the Indian Tariff Commission from 1952; also member of the Planning Commission.

Mehta, Jamnadas, M.A., LL.B., Bar-at-Law—Born 3rd Aug., 1884; member, Bombay Municipal Corporation; member Legislative Assembly 1923-29; President All-Indian Railwaymen's Federation; President, National Trade Union Federation, 1933-35; Workers' Delegate I.L.O. 1934; Mayor of Bombay 1938; Finance Minister in the Minority Ministry of Bombay 1937; was Govt. of India Representative to Burma.

Mehta, Asoke—born 24th Oct. 1911; educated at Wilson College, Bombay; one of the founders and prominent member of Socialist Party of India; Secretary, All-India Socialist Party; Editor of the party organ 1935-39; imprisoned several times.

Mahalanobis, P.C., M.A., F.R.S.—Born 1893; educated at Brahmo Boys School & Presidency College, Calcutta; received Tripos at Cambridge University; Senior Research Scholar at King's College, Cambridge; joined Presidency College, Calcutta 1917; M.A. of Cambridge University 1918; Hony. Secretary, Biswavarti, 1921-31; Sectional President of the Indian Science Congress, 1925, 1942; Secretary, Indian Statistical Society from 1931; Editor of *Sankhya* for several years; Statistical Adviser to many Govt. Committees and Commissions; Cal. University Professor of Statistics, 1941; General Secretary, Indian Science Congress 1945; elected F.R.S. 1945; President of the Indian Science Congress, 1950.

Mavlanker, G. V. B.A., LL.B.—born 1888; started law practice, 1913; took part in Kaira no-rent campaign 1917; entered Ahmedabad Municipality 1919; Secretary, Gujerat P.C.C., 1921-23; General Secretary, 36th Indian National Congress, Ahmedabad, 1921; visited England & Continent 1928; President, Ahmedabad Municipality, 1930-33 and 1935-36; imprisoned for Congress movements 1930, 1940-41 and 1942-44 and interned in 1933-34; Speaker, Bombay Legislative Assembly; President, Central Assembly 1946-47; Speaker, Indian Constituent Assembly, 1947-50; Speaker, Indian Parliament from 1950; Leader, Indian delegation to the Commonwealth Parliamentary Conference, London, 1948.

Mukherjee, Air Vice-Marshal Subrata—born 1911 at Calcutta;

joined R.A.F. College, Cranwell, England in 1929; was commissioned in 1930; served with No. 6 squadron R.A.F. for nine months; joined Indian Air Force in 1933; served in Peshawar in 1936; received training at the Staff College, Quetta; commanded air squadrons at Secunderabad and Trichinopoly; served various appointments with the rank of wing-commander; First Indian to command the Kohat Air Station in 1943; became Group Captain and later Air Commodore; visited U.S.A., Canada, Great Britain as a member of the National War Academy Sub-Committee; became Deputy Air Officer at Air Headquarters in the pre-partition days; Deputy Air Commander and Senior Air Staff Officer of R.I.A.F. in 1947; officiated as Chief of the Air Staff and Air Vice-Marshal Commanding of I.A.F. in 1948.

Menon, K. P. S., B.A., (Oxon.); I.C.S., C.I.E.—born Oct. 18, 1898; educated at St. Xavier's College, Madras and Oxford; joined I.C.S. in 1921; Addl. Dy. Secretary, Government of India 1929-33; Dewan of Bharatpur for three years; Agent to the Govt. of India in Ceylon 1929-33; Deputed by Govt. of India to enquire the position of Indians in Zanzibar, Kenya & Ugganda 1934; Agent-General of Govt. of India in China 1943-47; Indian Ambassador to China 1947; Chairman, U. N. Commission on Korea, 1948; now Secretary, External Affairs, Govt. of India.

Mukerjee, P. C.—born Oct., 1904; educated at Krishnagar Collegeiate School, Hastings House, Calcutta, and Clare Collage, Cambridge; joined Engineering Department of E. I. Ry. 1952; was also employment officer, Lilooah; Deputy Director and afterwards Director of Civil Engineering of the Department of Munitions, Production during World War II; Controler of Railway supplies with Railway Board 1946 and Deputy Director General (Development) with Industries and Supplies Department, Government of India 1946-47; represented India at the International Tin Conference in Brussels 1947; Became Deputy General Manager (Works) E.I.Ry.; General Manager of B.N. Ry., 1948-49; appointed first General Manager of the Indian Railways locomotive building project, at Chittaranjan.

Mody, Sir Homi P. M.A., LL.B.—Born 1881; educated at Bombay, member, Bombay Municipal Corporation, 1913-14; and its President, 1923-24; Chairman of the Mill-Owners' Association, Bombay, 1929-34; President of the Indian Merchants' Chamber 1928; President of the Employees' Federation of India, 1933-41; attended Round Table Conference; member, Central Assembly 1929-43; member of the Viceroy's Executive Council 1941-43; Director of Tata Sons Ltd.; delegate, I. L. Conference, Geneva, 1937; Governor of Bombay, Sept. 1947; Chairman, Associated Cement Companies; now Governor of the United Provinces from May 2, 1949.

Mudaliar, Sir A. Ramaswami—K.C.S.I.; born 1887; Member of the Madras Legislature, 1920-26; Mayor, Madras Corporation, 1928-30; member, Council of State 1930; member, Ind. Legislative Assembly 1931-34; delegate to the Round Table Conference; led the Indian Delegation to the British Commonwealth Relations Conference at Toronto; also served in the Economic Enquiry Committee of the League of Nations; member Viceroy's Executive Council, 1939-42 and 1943; was member of the British War Cabinet and Pacific War Council 1942-43; elected President of Social and Economic

Council of U.N. 1946; Dewan of Mysore 1946-49.

Munshi K. M. B.A.,, LL.B.—Born Dec. 30, 1887; educated at Baroda and Bombay; enrolled as Advocate High Court 1913; was a joint editor of *Young India* in 1915; Secretary, Bombay Home Rule League, 1919-20; fellow of the Bombay University since 1926; member Bombay Legislative Council 1927-30; member, Baroda University Commission, 1926; member, All-India Congress Committee 1931-37; was Home Minister, Bombay 1937-39; a well-known Gujarati novelist; left Congress in 1941 but rejoined in 1946; member, Indian Parliament; Agent-General of India in Hyderabad State 1947-48; now Food and Agriculture Minister, Government of India from 1950.

Mookerjee Dr. H. C. M.A., Ph.D.—born 3rd Oct. 1877; M.A. (First Class first) in 1898; Professor of City College 1899-1914; joined Calcutta University in 1915 as Professor, and remained upto 1941 a Inspector of Colleges; etc., Twice President, all Indian Council of Christians; member, Bengal Legislative Assembly 1937-42; Vice-President, Indian Constituent Assembly; Governor of West Bengal in 1951.

Menon, V. P.—born Sept. 1894; clerk of the Govt. of India, Home Department, 1914-24; transferred to Reforms Office, where he became Superintendent of Reforms; gradually rose to the position Under-Secretary, Deputy Secretary and Joint Secretary; was in charge of the Government of India Act in 1935, and supervised the elections of 1937; Reforms Commissioner 1942; at one time wore the triple Crown—Secretary to the Cabinet, Secretary to the Governor-General in addition to his post of the Refomrs Commissioner; Secretary to the State Department from 1947; officiated as Governor of Orissa in 1951.

Mukherji, Dr. Shayama Prasad, M.A., B.L., D.LITT., BAR-AT-LAW—Born July 1901; son of late Sir Ashutosh Mukherjee; Educated at Mitra Institution and Presidency College; Fellow of the Calcutta University since 1924; member of the Bengal Legislative Council 1929-37; member, Bengal Legislative Assembly 1937-47; Finance Member, Govt. of Bengal 1941-42; Vice-Chancellor, Cal. University 1934-38 & President of the Hindu Mahasabha; President, Royal Asiatic Society 1943-46; Minister of Industries and Supplies, Central Government 1947-50, President of the All-India Jan Sangh.

Mukherjee Sir B. N., M.A. (Cantab)—born February 14, 1890; educated at Calcutta and Trinity College, Cambridge; is a partner of the well-known firms of Martin & Co. and Burn & Co.; youngest son of Sir Rajendranath Mookerjee; joined the firm of Martin & Co. in 1924; became a partner of Burn & Co. in 1931 and of Martin & Co. Ltd. in 1934; was Sheriff of Calcutta, 1940-41; was member of the National Defence Council; member of the local board of directors of the Imperial Bank of India.

Narendra Deva, Acharya, M.A., LLB.—b. 1889; was member, A.I.C.C.; practised law upto 1922; Principal, Kashi Vidyapith; President, All-India Socialist Conference, 1934 and U.P. Provincial Conference, 1936; Member, Congress Working Committee 1936 & 1942; imprisoned in 1930, 1932, 1941 and 1942. Prominent member of the Socialist Party; Vice-Chancellor, Lucknow University upto 1951; now Vice-Chancellor, Hindu University.

Nanda, Gulzarilal—Educated at Lahore, Agra and Allahabad went to Bombay 30 years ago to participate in the freedom movement; was the leader of the Textile Labour Association of Ahmedabad and served as its Secretary 1922-1946; Parliamentary Secretary for Labour in the first Congress Ministry, Bombay 1937-1939; Minister of Labour, Bombay, 1947-1951; Deputy Chairman of the Planning Commission; now Minister of the Central Government with Planning portfolio.

Nehru, Sri Jawaharlal — Born Nov. 14, 1889; only son of the late Pandit Motilal Nehru; at the age of 15 was taken to England and admitted at Harrow Public School; then joined Cambridge University where he took tripos in natural sciences; called to Bar from Inner Temple; returned to India in 1912 and enrolled himself as advocate of the Allahabad High Court; Secretary of the Home Rule League, Allahabad, 1918; suffered first imprisonment for organising strikes and hartals during Prince of Wales's visit 1922-23; elected Secretary of the A.I.C.C., 1923; entered Allahabad Municipality and became its Chairman; arrested in the Nabha State and put to prison for agitation of the Akalis to perform a religious ceremony; visited Europe and attended Brussels Conference of Oppressed Nationalities as the official delegate of the Congress; elected President of the Congress at Lahore, 1929; re-elected President, 1930; arrested and sentenced to six months R. I. 1930-31; again arrested in 1931 and released in 1933; organized Bihar earthquake relief; was again arrested in Feb. 1934 and kept in jail 1935; went to Europe for his wife's treatment who died there, 1936; elected President of the Congress for third time, 1936; visited Spain during Spanish Civil War 1938; elected first President of the All-India States Peoples' Conference, 1939; visited China, August, 1939; arrested during individual Satyagraha Campaign 1940; took active part in the Cripps negotiation, 1942; was arrested for the ninth time with other members of the Congress Working Committee and kept in detention in the Ahmednagar fort up to June, 1945; has been member of the Congress Working Committee for over two decades; organised a Defence Council for the officers and men of the Indian National Army formed by Subhas Bose; Visited Singapore, March, 1946; joined interim government as member for External Affairs and Commonwealth Relations and was nominated Vice-President, Sept., 1946; Honorary LL.D., Patna University, 1946; same degree from Delhi University, 1948; called Asian Relations Conference at Delhi, 1947; Prime Minister of India and Minister for External Affairs and Commonwealth Relations as well for Scientific Research from 1947; went to England to participate in Commonwealth Prime Ministers' Conference, Oct., 1948; addressed United Nations Assembly at Paris, 1948; visited U.S.A. as a guest of the President Truman, 1949; Congress President in 1951; His books include — *Autobiography, Glimpse of World History; Discovery of India; Letters from Father to his Daughter; etc.* hobby—mountain climbing, swimming and horse-riding.

Neogy, Kshitish Chandra, M.A., B.L.—born 1888; educated at Dacca and Calcutta; member, Central Assembly 1921-34 and 1942-45; adviser to States Delegation to R. T. C. in London, 1930-32; Dewan of Mayurbhanj State 1940-42; Political Adviser of Mayurbhanj

State 1940-42; member, Standing Committee of Ministers of the Chamber of Princes 1940-42; Chairman, Committee of Ministers, Eastern States 1940-42; member of Council of Human Rights, U. N. 1946; Chairman, Indian Railway Enquiry Committee, 1947; Govt. of India Minister of Commerce, 1947-49; Chairman, United Bank of India 1950-51; President, Planning Commission.

Pandit, Mrs. Vijayalakshmi—Born 1900; sister of Pandit Jawaharlal Nehru, was the first woman Minister in India; took active part in the Congress movements of 1930 and 1932; President, All-India Women's Conference 1941; was sent to jail in 1930 & 1932; took extensive tour to America in 1944-45; again Congress Minister of U.P., 1946; leader of India Delegation to U.N. in 1946 and 1947 and 1948; India's Ambassador at U.S.S.R. 1948-49; India's Ambassador to U.S.A. 1949-1951.

Pant, The Hon. Pt. Govind Vallabh—Born Sept., 1887; educated at Muir Central College, Allahabad; enrolled Advocate, 1909; Leader, Congress Party, U.P. Assembly; was leader of the Swaraj Party in U.P. Council for seven years; took leading part in the non-co-operation movement, 1921; took active part in Satyagraha movement, 1930; member, Central Legislative Assembly in 1935; was Congress Prime Minister of U.P., 1937-39; again Premier from 1945.

Pakvasa, His Excellency Mangaldas Mancharam, B.A., LL.B.—b. 7th May, 1882; educated at Elphinstone High School and College, Bombay; was solicitor of Bombay High Court for 30 years; was in jail in 1932-1940 and 1942-43; was President, Bombay Legislature Council upto 1947; now Governor of Madhya Pradesh from 1947.

Panikkar, Sardar K. M.—Born 1895; educated in the Madras Christian College and Christ Chruch College, Oxford where he was the first Indian to obtain a first class honour in History, 1917; Professor of history, Aligarh University; joined non-co-operation and edited *Swarjya;* the first editor of *Hindustan Times,* Delhi, 1925; went to Europe 1925-31; Secretary, Chancellor of the Princes' Chamber 1931-37; held concurrently, portfolio of the Foreign, Political and Education Minister in Patiala; Prime Minister of Bikaner State 1944; now India's Ambassador to China 1948.

Patwardhan, Achyut—b. Feb. 5, 1905; educated at Central Hindu College, Banaras; took M.A. degree and proceeded to Europe; became Professor of Economics on his return; joined C.D. movement in 1932; started along with others Congress Socialist Party; went underground during August revolution, 1942-46.

Prakasam, T., Bar-at-Law—A prominent political leader of Madras; gave up a leading practice at the Bar for non-co-operation movement; member, Legislative Assembly 1926 and resigned in 1930; Imprisoned several times; Prime Minister of Congress Government, Madras, 1946-47.

Patil, S. K.—b. August 14, 1900; educated at Bombay; joined Congress movement in 1920; joined London School of Economics and London Univ. in 1924; joined *Bombay Chronicle* in 1927; General Secretary, B.P.C.C.; imprisoned several times; member of A.I.C.C. since 1930; Leader of the Congress Party in Bombay Corporation; Member, Central Board of Film Censors; President, Bombay Provincial Congress Committee; First Mayor of Greater Bombay.

Paranjpe, Sir R. P.—born 6th Feb. 1876, M.A. (Cantab), D.Sc. (Hon. Calcutta); late Vice-Chancellor, Lucknow University; educated at Ferguson College, Poona, St. John's College, Cambridge, Paris and Gottingen; Senior Wrangler of Cambridge 1899; Principal and Professor, Ferguson College, 1902-26; Minister of Education, Bom. 1921-23 & 1929; President, Indian National Federation; Fellow, Bombay University 1905-7; member, Bombay Legislative Council, 1913-16; Vice-Chancellor, Indian Women's University 1916-20; member, India Council, 1927-32; was Govt. of India Representative in Australia.

Ray, M. N.—Born February 1893; joined revolutionary movement in 1903; prosecuted for political dacoity in 1906; was also involved in Howrah Conspiracy Case in 1908 and Garden Reach Dacoity in 1914; at the outbreak of World War I joined in the revolutionary movement; went to China; went to America, went to Mexico and established Communist Party there; was called to Russia by Lenin and became the prominent member of the Communist International; was appointed head of the Eastern Department of the International; edited *'Vanguard'* and *'Masses'* from 1922 to 1928; Became head of the Indian section of the Eastern University, Moscow in 1927; was then expelled for various reasons; Secretly landed in India in 1930; was arrested and tried at Kanpur and sentenced to 6 years' R.I. After his release in 1936 joined the Congress; but left the Congress: founder of the Radical Democratic Party and Indian Federation of Labour.

Ray, Dr. Bidhan Chandra—Born 1st July. 1882 at Patna; educated at Patna; M.D. degree from Cal. University, 1908; got, L.R.C.P. (London) and M.R.C.S. (Eng.) in 1909; M.R.C.P. (London) and F.R.C.S. in 1911; President, Indian Medical Council 1939 & 1944; Fellow of the Calcutta University 1916; Vice-Chancellor, Calcutta University, 1942-44; D.Sc. (Cal.) conferred in 1944; Alderman of Calcutta for two times; Mayor of Calcutta for two times; imprisoned for six months in 1931; member, Bengal Legislative Council, 1923; President, B.P.C.C.; appointed Governor of United Provinces but declined the post; Premier of West Bengal, from 1947.

Ranga, Prof. N. G.—Born 7th Nov., 1900; educated at Oxford; Prof. of Economics, Pachyappa's College Madras, 1927-30; member, Congress Working Committee, 1947; President, All-India Kisan Congress, Rural People's Federation, Andhra Provincial Congress Committee; member of the Indian Parliament since 1934; President, All-India Handloom Weavers' Congress; India's delegate to FAO Conference, Copenhagen, 1946 and I.L.O. Conference, San Francisco, 1948; Led Indian delegations to the London (1946) and the Hague (1947) Conferences of International Federation of Agricultural Producers; has written many books; also principal of the Indian Peasants Institute, Nidobrolu inaugurated by Mahatma Gandhi in 1933.

Rahim, Sir Abdur, K.C.S.I., M.A., BAR-AT-LAW—born 1867, Judge, Madras High Court, 1908; member of the Royal Comm. on Public Services, 1912; Knighted in 1919; member of the Governor's Executive Council, Bengal, 1921-25; President, Indian Legislative Assembly, 1935-45; author of *Mahomedan Jurisprudence.*

Roy, Mrs. Renuka—A graduate of the London School of Economics; was a member of the Central Legislative Assembly from 1943-45; and then member of the Indian Constituent Assembly 1946-50; a prominent member of the All-India Womens' Conference; Member of the Government of India's Central Board of Education; member of the governing body of Tagore's Viswabharati since 1941; wife of S. N. Roy, I.C.S., late Administrator, Calcutta Corporation.

Raman, Sir Chandrasekhara Venkata, M.A., LL.D., D.SC. (Cal.), F.R.S.—Born at Trichinopoly, Nov. 7, 1888; educated at Hindu College, Vizagapatam and Presidency College, Madras and graduated in 1904 and got master's degree three years later; entered the Indian Finance Department as Assistant Accountant General after winning first place in a competitive examination; came to Calcutta in 1909 where he began his scientific researches; Palit Professor of Physics at the Calcutta University 1917; visited Europe in 1921 as a delegate to the Congress of the Universities of British Empire; became Ghose Travelling Fellow, 1924; visited America and represented India at the centenary of the Franklin Institute of Philadelphia; represented India at the bicentenary of the Russian Academy of Sciences at Leningrad and Moscow, 1925; discovered the phenomena known as 'Raman effect' in 1928; Received Mteucci medal, Rome 1928; created Knight, 1929; received Hughes medal of the Royal Society, 1930; Awarded Nobel Prize for physics, 1930; resigned Calcutta University Professorship 1933; and became Director of the Bangalore Science Institute; began to build Raman Research Institute in Bangalore 1943; Awarded Franklin medal of America, 1941; President, Indian Science Congress 1928; Fellow of the Royal Society, 1924; Fellow of the Franklin Institute, Royal Irish Academy, Zurich Physical Society.

Radhakrishnan, Sir, S., M.A., D.LITT., F.B.A.—Born 5th Sept., 1888; was educated in the Madras Christian College; was professor of Philosophy, Presidency College, Madras (1911-17), Mysore University (1918-2); George V Professor of Philosophy, Calcutta University (1931-36); Vice-Chancellor, Banaras Hindu University (1939-48); Upton Lecturer, Manchester College, Oxford (1926 and 1929-30); Haskel Lecturer in comparative religion, University of Chicago (1926); President, Indian Philosophical Congress, 1927 & 1950; Hibbert Lecturer (1929); Spalding Professor of Eastern Religions since 1936; was member of the International Committee on Intellectual Co-operation of the League of Nations (1931-39); Hony. Fellow of the Royal Asiatic Society of Bengal; President Indian Universities Commission; now India's Ambassador to U.S.S.R., Author of *Indian Philosophy* (2 vols.); *Hindu View of Life; Kalki* etc.

Rajagopalachariar C., B.A., B.L.—born in 1879, educated at Presidency College and Law College, Madras; joined Bar in 1900 at Salem; gave up his practice and joined Rowlat Act Satyagraha campaign, 1919; served many periods of imprisonment; edited Gandhiji's *'New India';* General Secretary of the Congress, 1921-22; member of the Working Committee of Congress 1941; and again in 1946; was the President of the Tamil Nad Congress Committee till 1935; was Premier of the Congress Ministry at Madras, 1937-39; left Congress in 1942 on account of the difference of opinion; but joined in 1945; member, Indian Interim Government, 1946-47; Minister, Indian Union Government, 1947; Governor of West Bengal 1947-48; Governor-General of India, 1948-50; Minister of Hom Affairs 1950-51.

Rajendra Prasad, Dr., M.A., M.L., LL.D. (All.)—born 3rd Dec., 1884 in Jiradei in the district of Saran, Bihar; passed M.L., 1925; was a prominent member of the youth movement of Bihar and leader of the Behari Students' Conference; member of the Patna University Senate for several years; Twice President, All-India Hindi Literary Conference; joined Mahatma Gandhi in 1917 in famous Champaran Agrarian affairs; joined the non-co-operation movement in 1920; suspended his practice in 1920; was General Secretary of the Congress, 1922; member of the Congress Working Committee; was President of the Bombay and Calcutta Congress 1934 and 1939; imprisoned for August movement in 1942 and released in 1945; Minister of Food, Indian Union, 1947; resigned from Cabinet in 1947 after election as Congress President; also President of the Indian Constituent Assembly 1946-49; President of the Republic of India from 1950; author of the *'India Divided.'*

Rajendrasinhji, Lt-General Maharaj—born June 15, 1899; educated at Rajkumar College, Rajkot and Royal Military College Sandhurst; was commissioned in 1921; went to N. Africa as Squardron Commander in 1941; is the first Indian to win D.S.O. in the World War II: was appointed Commandant of the 2nd Royal Lancers in 1943; Deputy Director of Public Relations, Govt. of India in Washington, 1945; Military Attache in Washington 1945; became Brigadier, 1946; was appointed Director of Indian Armoured Corps; Commander of Delhi Sub-Area, 1947; G.O.C.-in-Chief, Southern Commmand, 1948; was the leader of the Hyderabad Campaign, 1948.

Rau, Benegal Narsing, C.I.E., I.C.S.—1887; educated at Madras and Cambridge; joined I.C.S. in 1910; Secretary of the Government of Assam, 1925-33; Jt. Secretary, Govt. of India Legislative Dept., 1934-35; Judge, Calcutta High Court; Officiating Reforms Commissioner, 1938; President, Hindu Law Committee, 1941; Prime Minister, Jammu and Kashmir, 1944-45; Constitutional Adviser to the Constituent Assembly of India; elected member of the International Law Commission by U.N., 1948; India's Permanent Representative on the United Nations for three years; led the Indian Delegation to U.N. 1949-50; Indian member of the Security Council of the U.N. 1950-51; elected Judge of the International Court of Justice, Hague, 1951.

Rau, Sir Bencgal Rama, Kt., C.I.E.—born Jan. 10, 1889; educated at Madras and Cambridge; entered I.C.S. 1913; Secy., Indian Taxation Committee 1925-26; Financial Officer, Simon Commission 1928-30; Dy. High Commissioner for India, London 1934-38; Agent General for India in South Africa 1938-41; Chairman, Bombay Port Trust, 1941-46; Indian Ambassador, Tokio 1947-48; Indian Ambassador U. S. A. 1948-49; Governor, Reserve Bank of India since 1949.

Ranadive, B. T., M.A.—**Born 1904;** joined Communist movement in 1928; has been in jail several times; has edited communist papers; member of the Central Committee of the Polit Buro; was elected general secretary of the Communist Party of India in 1948.

Sarkar, Nalini Ranjan—born 1888; Gave up studies in 1906; and joined the Swadeshi Movement; entered the National Council of Education; entered Hindusthan Co-operative Insurance Co.; and became its Manager; was elected whip of the Bengal Swarajya Party in 1923; member, Bengal Legislative Council; President of the Bengal National Chamber of Commerce, 1932, 1934; Represented the Chamber on the Calcutta Port Trust;; member, Indian Central Banking Enquiry Committee; President of the Federation of the Indian Chamber of Commerce, 1933; Mayor of Calcutta, 1934-35; Minister of Finance, Bengal Government, 1935; Member of the Viceroy's Executive Council which he resigned in 1943; Chairman, All-India Council of Technical Education; Minister of Finance, West Bengal, 1948-52.

Sarkar, Sir Jadunath, Kt., C.I.E., M.A.—Born Dec. 10, 1870; (1892, 1st class, 1st in English, with records marks): Gold Medalist and Prizeman; P.R.S., D.LITT. (Dacca) and Mouat Medalist, 1897; Professor, Metropolitan Institution, 1893; Prof. Presidency College, 1898-1901; Patna College, 1899-1917; Head of the Indian History Dept., Banaras Hindu University, 1917-1919; Indian Educational Service, 1918; Prof., Ravenshaw College, Cuttack, 1919-23; Patna College again 1920-22, C.I.E. Vice-Chancellor, Calcutta University 1926-1928, Honorary Fellow Royal Asiatic Society; Member of the Historical Records Commission; Sir William Mayer Lecturer, Madras University; author of *Aurangzeb,* 5 vols.; *Sivaji: Fall of the Mughal Empire,* etc.

Sampuranand, Sri—b. Jan. 1; 1891, started as school master; worked at Daly College, Indore, 1915-18; was professor, Kashi Vidyapith 1922; member, A.I.C.C.; was Secretary, U.P. Provincial Congress Committee; President, Second All-India Socialist Conference; Ex-Minister of Education of U.P. Government, 1938-39, now Minister of Education, Finance and Labour, U.P., 1947.

Saksena, Prof. Shibanlal, M.A.—Born July, 1907; educated at Kanpur and Allahabad and Agra Universities; Professor St. Andrews College, Gorakhpur 1930-31; joined non-co-operation movement in 1920; joined Salt Satyagraha in 1930; became whole time honorary worker of the Congress movement 1931; General Secretary, Kanpur District Congress Committee 1931; member U.P.P.C.C. and A.I.C.C. in 1930; imprisoned several times; became Congress M.L.A. from 1937-46; imprisoned during 'Quit India' rebellion in 1946; member of the Constituent Assembly 1946; Vice-President A.I.T.U.C. upto 1948.

Sachar, Bhim Sen—B.A., LL.B., born Dec. 1, 1893; educated in the Punjab and joined Bar 1918; joined non-coperation movement, 1926; member, Punjab Legislative Assembly 1936-45; Member, Constituent Assembly 1949; Finance Minister Punjab Govt. 1946-1947; Premier, East Punjab, 1949.

Saksena, Mohanlal, M.SC., LL.B.—born 1896; after passing the LL.B. examination joined bar at Lucknow in 1919; Actively associated with the Congress politics since 1921; was imprisoned several times; was a member of the Prov. Council during 1924-26 and a member of the Central Assembly for several years; member of the Indian Constituent Assembly; Minister of State for Relief and Rehabilitation, Govt. of India 1948-49.

Sarabhai, Mridula Ben—daughter of Ambalal Sarabhai, Gujerat's cotton magnate; educated at Gandhiji's Gujerat Vidyapith in

1928; entered in Indian politics in the age of 19; has served three terms of imprisonment in 1930, 1932 and 1942; organising Secretary of the Kasturba Memorial Fund; Joint-Secretary of the Congress for sometime, 1946.

Shukla, The Hon. Pandit Ravi Sankar—born Aug. 2, 1877; joined bar in 1908; joined non-co-operation 1923; entered Legislative Council 1923 as Swarajist; was Minister of Education in C.P., 1937-39; Prime Minister of M.P. from 1947.

Sidhwa, Rustom Kurshed—born in Sind; started his life as a clerk in the Posts and Telegraph Department; started weekly journal *Parsi Sansar* in 1909; joined politics and supported Home Rule movement; joined Congress in 1913; member of the A.I.C.C.; was member of the Sind Legislature for many years and became the leader of the opposition; Municipal Commissioner of Karachi 1928-47; Mayor of Karachi Municipality in 1939; member, Constituent Assembly from C.P. 1947; has migrated to India from Pakistan, 1947; Minister of State Government of India from 1951.

Singh, Sardar Baldev—educated at Khalsa College, Amritsar; joined Unionist Ministry of Punjab Assembly; was Minister for Development and Civil Supplies jab in 1942; was the leader of the Panthic Akali Party of the Pun- in the Punjab Coalition Ministry, 1946; Defence Minister, Indian Interim Government, 1946; now Defence Minister, Government of India from 1946.

Singh, The Hon. Sri Srikrishna—b. Oct. 21, 1888; educated at Patna College and qualified for law in 1915; joined politics in 1921; was chosen as the leader of the Swaraj Party in B. & O. Council in 1927; was a Congress member in the Central Legislative Assembly; Chairman, Monghyr District Board in 1932; imprisoned for two years; Congress Prime Minister of Bihar, 1937-39; now Prime Minister of Bihar from 1946.

Sen, Benoy Ranjan, C.I.E., I.C.S.—b. Jan. 1, 1898; educated at Calcutta and Oxford; entered I.C.S. in 1922; Filled several executive posts in undivided Bengal including that of Revenue Secretary; was Director of Civil Evacuation during early years of World War II; transferred to the Centre in the Food Ministry; entered Foreign Service in 1947, as Minister in the Indian Embassy in Washington; promoted to the rank of ambassador and transferred to Rome; Ambassador of Egypt, 1951; now Ambassador to U.S.A. from 1951.

Singh, Anugrah Narayan, M.A., B.L.—born 1889; joined Patna Bar and practised till 1921; joined non-co-operation movement and Champaran Agrarian Enquiry with Mahatma Gandhi, 1917; was General Secretary, Bihar P.C.C.; President, B.P.C.C., 1928; member of the Council of State 1926-29; Member, Central Assembly, 1934-37; Finance Minister, Bihar Govt. 1937-39; now Finance Minister of the Bihar Government.

Shastri, Hariharnath—B.A., born Oct. 26, 1904; entered trade union movement 1926; President, All India Trade Union Congress 1933-35; member, Constituent Assembly 1947-50; Workers' delegate to I.L.O. Conference 1948, 1950, 1951; President A.I.N.T.U.

Singh, Raja Sir Maharaj, M.A., C.I.E., KT., BAR-AT-LAW—b. 1878; educated at Harrow, Oxford and London; joined India Govt. Service in 1904; Asst. Secy. Govt. of India 1911; Secretary to U.P. Government, 1919; Commissioner, Allahabad, 1927 and 1929; Chief Minister, Jodhpur State 1931; Agent-General to Govt. of India in South Africa; Home Member, U.P. Government 1935-1937; Vice-Chancellor, Lucknow University 1941; Member, Govt. of India Committee of Enquiry on the position of Indians in East Africa 1946; Member, Indian delegations to the U.N., 1946; now Governor of Bombay from 1948.

Singh, Master Tara—born in Hindu family: embraced Sikh religion at the age of 17; began his life as a teacher; took prominent part in Nankana Sahib agitation; joined C. D. movement in 1930; a prominent Sikh leader of the Akalis; was once a prominent member of the Congress Party; was President, Sheromani Gurudwara Prabandhak Committee; has suffered imprisonment for political cause; a prominent supporter of the separate homeland for the Sikhs.

Singh, St. Nihal—born June 2, 1884; educated at Punjab University; Author, journalist, lecturer, traveller; served as special correspondent of *'Observer'* and other papers during Prince of Wales' visit to India 1921-22; contributed to magazines, newspapers, reviews all over the world; has lectured before prominent societies; author of many books, contributor to *'Hindu'*, *Madras*, *'Literary Digest'*. America.

Saha, Meghnad, D.SC., F.R.S.—b. 1893; B.Sc. 1913 (1st Class, 2nd in Mixed Mathematics), P.R.S. and D.SC. 1919. Worked at the Imperial College of Science, London and Berlin; Lecturer, College of Science, Cal. University; Khaira Professor of Physics, Cal. University, 1921-23; Professor, Allahabad University, 1923 and Head of the Department of Physics; Fellow, Royal Society; President, Indian Science Congress, 1934; corresponding Member of the German Academy of Sciences; Carnegie Research Scholar for 1935-36; Delegate to the Volta centenary in Italy, 1927; Attended Harvard University Centenary celebration in America in 1933; the founder President of National Academy of Sciences; now Palit Professor of Physics, Calcutta University.

Sinha, Satyanarain—born 1900 at at Darbhanga; educated at Patna; started his political career with a term of imprisonment in jail in 1920 for non-co-operation movement; member, Behar Legislature 1926-30; Chief Whip of the Congress party, Central Assembly and also in the Constituent Assembly; Minister of State of Parliamentary Affairs, Govt. of India from 1949.

Singh, Jaipal—born 3rd January, 1903 in Ranchi District belonging to Adhibasi race; educated at Ranchi, and Oxford; was I.C.S. probationer at Oxford, 1927-28 which he resigned; was leading hockey player of India; First Indian to get Full Blue at Oxford; was in Colonial Service in British East Africa, 1933-36; Colonisation Minister and Revenue Commissioner, Bikaner, 1937-38; Editor, *'Adibasi Sakam'*; member of the Board of Secondary Education, Bihar; member of the Constituent Assembly of India.

Sitaram, Dr.—born on January 12, 1885; was associated with Indian National Congress from 1905 to 1919; member U.P. Legislative Council 1921-48; President U.P. Legislative Council 1925 to 1948; a member of Executive Council of the Allahabad University for several years; was High Commissioner of India to Pakistan 1949-50.

Sitaramayya, Dr. Pattabhi—born Nov. 24, 1880, in Andra Desa; joined Congress in 1898 when still a medical student; has been Congress delegate since 1914; discontinued medical practice in 1916;

member of the A.-I.C.C. since 1916; was member of the Congress Working Committee from 1929 with some breaks; was President of the Indian States Peoples' Conference; contested presidential election for Congress against Subhas Bose in 1939 but was defeated; brought out official history of the Congress; started English Weekly '*Janmabhumi*' in 1919; imprisoned for Salt Satyagraha in 1930; was sent to jail twice, later in 1932 and 1933; was detained in August, 1942 under D.I. Rules; President of the Congress, 1948-49.

Savarkar, Vinayak Damodar—Born 1883 at Nasik, Bar-at-Law; educated at Fergusson Colllege, Poona; joined nationalist movement· was sent to England where he worked for Indian freedom under Shyamaji Krishnavarma and Madame Cama; was arrested in England for Nasik Conspiracy Case, but escaped from ship at Marseilles in 1910, but was re-arrested and transported for 15 years; transported to Andamans from where afterwards interned at Ratnagiri; was set free by interim Bombay Ministry 1937; is a linguist and poet; was President of the Hindu Mahasabha for several years; retired from active politics.

Saadulla, Muhammad—Born 1886; educated at Cotton College; practised as lawyer in Gauhati, 1909-10; member, Assam Legislative Council, 1913-20; Minister, Assam Government, 1924-29; member, Executive Council Assam, 1929. 30; Prime Minister of Assam, 1937-38 and again 1939-42.

Subedar, Manu — educated in Bombay and London Universities, Lecturer in Economics, Bombay University; Prof. Calcutta University; sent to England by Government of India to give evidence before the Babington Smith Committee; member of the Central Banking Enquiry Committee; member, Bombay Corporation; Vice-President, Indian Merchants' Chamber, 1932; member, Central Assembly 1937.

Sri Prakasha Sri, B.A., LL.B. (Cantab), Bar-at-Law—b. 1890; educated at Allahabad and Cambridge where he got B.A. tripos with honours in history and was called to the Bar in 1914; was connected with Banaras Hindu University 1914-17; member, Banaras Municipal Board 1921-25; member of the A.I.C.C. 1918-45; General Secretary, U.P.C.C. for seven years. President of the U.P.C.C. 1934-35; General Secretary of the Congress 1929-31; Chairman of the Reception Committee, 1936 session of the Congress; was imprisoned for Congress activities in 1930, 1932, 1941 and 1942; India's High Commissioner in Pakistan 1947-49; Governor of Assam 1949-50, Commerce Minister of the Central Government from 1950.

Sokhey, Major-General Sir Sahib Singh—born 1887; obtained medical degrees in Edinburgh and London; did post-graduate work in Johns Hopkins University; Harvard Medical School; Toronto Medical School and Trinity College, Cambridge; was director of Haffkine Institute, Bombay for several years; appointed Assistant Director-General of the World Health Organisation in charge of the Department of Central Technical Services.

Srivastava, Sir J. P., K.B.E.—educated at Kanpur and Muir Central College, Allahabad; studied at Manchester School of Technology; became Principal of the Textile School, Kanpur; Industrial Chemist to U.P. Government; became head of number of Textiles mills and industrial concerns in

U.P., Managing Director of the *Pioneer;* member, U.P. Legislative Council; Honorary Chairman of the Kanpur Improvement Trust; Minister of Education and Industries, U. P. 1931-37; Member, National Defence Council; was Food member of the Government of India.

Tata J.R.D.—born 1904; joined Tata Sons Ltd., in 1922; First and became its direction 1926 pilot to qualify in India in 1929; appointed Chairman Tata Sons Ltd., 1938; now Chairman and Director of all Tata and Associated Companies; one of the authors of *'Bombay Plan.'*

Tandon, Purshottamdas—born 1882 at Allahabad; educated at Government College and Muir Central College, Allahabad; passed LL.B. degree and enrolled as advocate at Allahabad; Law Minister of Nabha State 1914-18; Chairman of the Allahabad Municipal Board; joined Congress in 1899 gave up his profession and joined freedom movement in 1919; went to jail seven times; President of the U.P. Congress 1923 and 1948; general manager of the Punjab National Bank 1925-29; founded the Central Kisan Sangh in 1930; Speaker of the U.P. Legislative Assembly 1937-1950; member of the Constituent Assembly; one of the founders of the Hindi Sahitya Sammelan; President of the Congress 1950-51.

✓ **Tara Chand, Dr.,**—born 1888; educated at Delhi, Meerut, Allahabad and Oxford; professor of History at the Kaysastha Pathsala College, Allahabad and then its principal for 20 years; was Vice-Chancellor of the Allahabad University for several years; Secretary, Ministry of Education, Govt. of India; now Indian Ambassador to Persia; and author of *Influence of Islam on Indian Culture, Short History of the Indian People.*

Trivedi, Sir Chandulal Madhavlal, K.C.S.I.—born 2nd July 1893; educated at Elphinstone College, Bombay and St. John's College, Oxford; entered I.C.S. in 1917; Assistant Commissioner C.P.; Dy. Secretary, Govt. of India (Home Dept.) 1932-35; Commissioner of Berar 1936; Chief Secretary, Govt. of Central Provinces and Berar, 1937-42; Secretary to the Govt. of India (War Dept.) 1942-45; Governor of Orissa 1946-47; now Governor of Punjab, 1947.

Thakurdas, Sir Purushotamdas, C.I.E., M.B.E.—Born May 30, 1881; was educated at the Elphinstone College and joined the firm of Narandas Jayram, 1902; Sheriff of Bombay 1920; member Inchcape Committee; Member, Council of State 1922-23; member Legislative Assembly, 1924-30; Thrice President, of the Indian Merchants' Chamber; President, Indian Chamber of Commerce; Member of the Royal Commission on Currency 1926; Vice-Chairman of the Indian Central Banking Enquiry Committee.

Vijayaraghavachariar, Dewan Bahadur, Sir—born 1875 at Karur, South India; Secretary, Board of Revenue 1917-18; Dewan of Cochin, 1919-32; Commisioner for India, British Empire Exhibition, 1922-25; member, Public Service Commission, 1926-29; leader of the Indian delegation, International Council of Agricultural Research; Dewan of Udaipur.

Vinoba Bhabe, Acharya—born Sept. 11, 1895 in Maharashtra; educated at Baroda College; joined political movement in 1915; came under the influence of Mahatma Gandhi in 1916; since then has worked for the propagation of Gandhian ideals; started *Sarvodaya* movement after

Gandhiji's death which means uplift for all; started the great "Land-gift" mission in 1951.

Visvesvaraya, Sir M., K.C.I.E.,—Born in 1861 in Kolar District; Graduated from Central College Bangalore, 1881; studied engineering at Poona; joined Bombay engineering service and retired in 1909; appointed Chief Engineer of the Mysore State 1909; was appointed Chairman of the Bombay Irrigation Enquiry Committee; Chairman of the Indian Economic Enquiry Committee 1925; Member, Bombay Back Bay Enquiry Committee, 1929; Dewan of Mysore, 1912-18; His notable books; *A Planned Economy for India, Reconstructing India.*

Vizianagram, Maharaja Kumar of——b. Dec. 28, 1905; educated at Princes College, Ajmer and England; captain of the Indian Cricket team which toured England in 1936; a great Sikari; was Minister for Justice in U.P. Government.

Walchand Hirachand—born 1882 at Sholapur; began his life as a contractor after finishing education; President, Indian Merchants' Chamber, Bombay, 1927; President, Federation of Indian Chambers of Commerce, 1932-37; President, Indian National Shipowners' Association; Employers' delegate to I.L.O. Conference at Geneva, 1932; Vice-President, International Chamber of Commerce, Paris 1934-35 and 1936-37; Chairman, Scindia Steam Navigation Co. upto 1950; Director, Associated Cement Co., Ltd., Tata Chemicals Ltd., etc.

LATEST AND CHOICEST BOOKS

FICTION
WAR
SEX
ART
PHILOSOPHY
PSYCHOLOGY
MEDICAL
POLITICS
PHOTOGRAPHY
PALMISTRY
HOUSEHOLD
REFERENCE
BUSINESS
HISTORY
GEOGRAPHY
ECONOMICS
CHILDREN'S BOOKS
SELF IMPROVEMENT
CRICKET

MODERN BOOK DEPOT
(*Calcutta's Treasure House of Books*)
(Opposite Lighthouse)
9, CHOWRINGEE CENTRE, CALCUTTA—13.

GENERAL ELECTION

SUPPLEMENT

INDIA'S FIRST GENERAL ELECTIONS

The General Elections in India has been conducted on such an unprecedented scale that it cannot fail to attract world wide attention. No nation has yet attempted such a major experiment in democracy.

The sheer physical problems of arranging an election in which more than 175,000,000 people have the right to vote are formidable; it has been found necessary to provide 200,000 polling booths with 1,900,0000 ballot boxes. The task of printing 520,000,000 ballot papers to enable votes to be cast for both local and central legislatures is gigantic.

SECRECY IN VOTING

Special precautions was taken to ensure secrecy in voting, to provide facilities for women and for the infirm, and to limit the expenses that candidates may devote to the election.

The use of cars to convey voters to the polling booths was forbidden on the ground that their employment would give wealtheir candidates an unfair advantage. In consequence of this decision, it was necessary to provide polling booths within easy walking distance of every village—something that was never been attempted in India before. A fixed limit of expenses was laid down for candidates in each constituency, worked out separately in every State with an eye to local conditions, the area to be covered and the state of communications.

The introduction of universal adult franchise in a population as large as that of India presents formidable difficulties and some of them are now coming to light. This is particularly true in the case of women voters.

It has been found possible to prepare a reasonably accurate enumeration of all the women in India whose age entitles them to vote. It is then that the real trouble begins.

Many women are reluctant to reveal their names; partly because they prefer to keep them secret from all but members of their own family, partly because they feel that there is something improper in the lead that the State is singling them out as independent individuals with an existence apart from their home circle.

In spite of all the persuasions of the enumerators and the broadcast appeals made by the Chief Election Commissioner, nearly 3,000,000 women voters made it clear that they prefered to lose their votes rather than make known their names. In the five States of Uttar Pradesh, Bihar, Madhya Bharat, Rajasthan and Vindhya Pradesh, where old customs still rule most strongly, some 10 per cent of the total woman electorate deliberately disfranchised itself.

THE ELECTION LAW

The People's Representation Act passed by the Parliament in 1950 is the legal document which has set forth all the details of the election in India. The following are the main provisions of the Act—

(1) The Act debars from contesting elections all persons holding government contracts or directorship of a company and those dismissed from government services for curruption or disloyalty.

(2) Minimum age prescribed for a candidate to the House of the People and State Legislatures is 25, while the minimum age for Upper House is fixed at 30.

(3) Persons belonging to the Scheduled Castes, or Tribes are eligible to contest an unreserved seat, but no one who is not a member of Scheduled Caste or Tribe can contest a seat reserved for them.

Electorate—Universal adult suffrage granted by the Constitution has made half of India's population eligible to become voters.

Qualification of the Voters

1. (*a*) he must be a citizen of India, of sound mind and 21 years of age (*b*) he should not have been convicted of any illegal or corrupt practices or other electoral offences (*c*) he should be registered in any constituency, if he is ordinarily resident therein.

2. For elections to the Legislative Council, a voter should be a graduate of a university ordinarily resident in the State for which Legislature Council is to be formed or a teacher in a school not lower than the Secondary School or a member of a local self-government institutions, such as municipalities, District Boards, etc.

Punishable offences—(*a*) The voter should not be enrolled in more than one place (*b*) voter should not create any disturbance in the meeting of other candidates. Police has been given powers to prosecute such disturbers (*c*) It is not only immoral but also punishable to sell vote. (*d*) It is an offence to intimidate or use undue influence or threat of divine displeasure to induce a votor to vote in a particular way. (*e*) No convassing, no meeting, no solicitation of votes within 100 yards of polling station. (*f*) It is an offence to provide conveyance to voter by the candidate for going to polling station. (*g*) Impersonation is a criminal offence with severe penalties

Political Symbols-Election Commission alloted distinct symbols for the condidates of each political party contesting the election. The use of well-defined symbol as a badge and rallying-point, sharing a common interest was, of course not new. Nazi Swastika and the communist hammer and sickle are examples on the point. What was new in India was the decision of the Election Commission to utilize the idea of symbols as part of the official electoral machinery of the country. A separate ballot box for each condidate was prepared and each box was marked with a distinct familiar and easily recognizable symbol, so that voter only had to drop his ballot paper into particular box to record his vote for the favoured candidate. Also the new system of ballot boxes carrying symbols of contesting parties, eliminated the need for the marking of ballot paper by the voter with the result that the voter only has to drop his ballot paper into a particular box to accord his vote for favoured candidate.

Single member, Double member and Trible member Constituencies—The huge electorate of India had to elect simultaneously at least one representative for State Legislative Assembly and one for the House of the People. In a double member constituency—where an additional set was reserved for scheduled castes or scheduled tribes—there were 666 such, including two three-member constituencies—each voter was elected as many as three to five reprsentatives at one and the same election. In a Parliamentary constituency in West Bengal and a State Assembly constituency in Bombay, three representatives including a scheduled caste and a scheduled tribe have been elected by the same electorate.

States with no Legislatures—The following States no legislatures—Bilaspur, Kutch, Manipur and Tripura.

Delimitation of the Constituencies—The delimitation of the constituencies of the House of the People and State Assemblies has been done on three principles—(*a*) Geographical contiguity which means that constituency must form one continuous stretch of territory and not into fragments separated from one another by parts belonging to a different continuency. (*b*) Equity of representation which means every voter must have an equal voice in the election for which he is voting. So to ensure equality of representation all constituencies must contain a more or less equal number of voters. For this reason, an upper and lower limit to the number of inhabitants in a constituency has been prescribed. The upper limit for a House of the People constituency is fixed at 7,50,000 and lower limit at 5,00,000. That is to say, no constituency for the House of the People can have more that 7,50,000 inhabitants or less than 5,00,000.

But this principle of delimitation can not be obviously applied to Part C States which are too small for the limits set up. These States therefore have been granted representation on a special basis.

As for State Assemblies, only a minimum has been fixed and this minimum is 75,000. This means no constituency for an Assembly in Part A or B can have less than 75,000 inhabitants. But this rule has been relaxed in the case of Pepsu and Saurashtra, otherwise these two states would have less than 60 members in their Assemblies which is not permissible, as 60 is the minimum strength for a State Assembly. (*c*) delimitation of the constituency should not split up the existing administrative divisions. The boundaries of an Assembly constituency should as far as possible be made to coincide with the boundaries of an administrative unit even at the risk of getting the constituency bigger or smaller than the normal figure of inhabitants;

METHOD OF ELECTIONS

Election of the President

(*a*) to be chosen by an electoral college consisting of elected of members of the Legislative Assemblies of the States.

(*b*) Proportional representation by means of single transferable vote.

(*c*) voting by the secret ballot.

Election of the Vice-President

(*a*) by the members of both Houses of Parliament at a joint session.

(*b*) Proportional representation by means of the single transperable vote.

(*c*) voting by the secret ballot.

Council of States Election

Qualifications—(1) Any citizen of India who is not less than 30 years of age and is not specially disqualified.

Maximum total strength under Constitution	250
Total strength now fixed	216
Member from States	204
Elected members	200
Nominated members	16

Method of Election—(*a*) From Part A, B, and some Part C States by elected members of the Legislative Assemblies. From other Part C States by electoral colleges. (*b*) Proportional representation by means of the Single Transferable Vote.

Note: Of these 204 members from various states, 12 are nominated by the President; members of all States except four are elected by the elected members of the Legislative Assemblies of these States. The four exceptions are Kutch, Manipur, Tripura and Kashmir. Of these the members from Kutch, Manipur and Tripura are elected on electoral colleges whose members in their turn are be elected by the voters of the State on the basis of adult franchise, while the members from Jammu and Kashmir is nominated by the President. No elected seat is allotted to Andaman and Nicobar Islands.

ALLOCATION OF MEMBERS OF COUNCIL OF STATES

Part A States		*Part B States*		*Part C States*	
Assam	6	Hyderabad	11	Ajmir Coorg	1
Bihar	21	Kashmir	4		
Bombay	17	Madhya Bharat	6	Bhopal	1
M. P.	12	Mysore	6	Bilaspur Himachal Pradesh	1
Madras	27	Pepsu	3		
Orissa	9	Rajasthan	9	Delhi	1
Punjab	8	Saurashtra	4	Kutch	1
U. P.	31	Travancore-Cochin	6	Manipur Tripura	1
West Bengal	14				
				Vindhya Pradesh	4
	145		49		10

House of the People Election

Qualification : Any citizen of India who is not less than 25 years of age and is not specifically disqualified, can stand for election to the House. The whole adult body of electors of India will directly vote.

Strength of the House—Total strength of the House of the People has been fixed at 496. Out of these 496 members, 489 are elected directly by the voters of the country, while 7 are nominated by the President—6 for Jammu and Kashmir and one for Andaman and Nicober Islands.

ALLOCATION OF SEATS OF THE HOUSE OF THE PEOPLE

Part A States

	Total	*General*	*Scheduled Castes*	*Scheduled Tribes*
Assam	12	9	1	2
Bihar	55	42	7	6
Bombay	45	37	4	4
M. P.	29	22	12	3
Madras	75	62	12	1
Orissa	20	13	3	4
Punjab	18	15	3	—
U. P.	86	69	17	—
West Bengal	34	26	6	2

Part B States

	Total	*General*	*Scheduled Castes*	*Scheduled Tribes*
Hyderabad	25	21	4	—
Kashmir	6	6	—	—
M. P.	11	8	2	1
Mysore	11	9	2	—
Pepsu	5	4	1	—
Rajasthan	20	18	2	—
Saurashtra	6	6	—	—
Travancore-Cochin	12	11	1	—

Part C States

	Total	*General*	*Scheduled Castes*	*Scheduled Tribes*
Ajmer	2	2	—	—
Bhopal	2	2	—	—
Bilaspur	1	1	—	—
Coorg	1	1	—	—
Delhi	4	3	1	—
Himachal Pradesh	3	2	1	—
Kutch	2	2	—	—
Manipur	2	1	—	—
Tripura	2	2	—	—
Vindya Pradesh	6	4	1	1
A. & N. Islands	1	1	—	—

Election of States Assemblies

States with bicameral legislature (i.e. Legislative Council)—Bihar, Bombay, Madras, Uttar Pradesh, Punjab and West Bengal.

State with one Legislature (i.e. Legislative Assembly)—Assam, Madhya Pradesh, Orissa, Hyderabad, Madhya Bharat, Pepsu, Rajasthan, Sourashtra, Travancore-Cochin, Coorg, Ajmer, Bhopal, Delhi, Himachal Pradesh and Vindya Pradesh.

Qualification—Any Indian citizen who is not less than 30 years of age and is not specifically disqualified.

Legislative Council Elections.

Election of members is from four different sources—(1) About one-third are elected by the members of the Legislative Assembly from among those who are not members of the Assembly, (2) Another one-third are elected by those who are members on the qualifying date, of local bodies like District Boards and Municipalities etc., (3) About one-twelfth are elected by graduates of at least three years' standing of any Indian University, (4) Another one-twelfth are elected by teachers of at least three years' service (at any time during a period proceeding the qualifying date) at a high school or a college. The qualifying date in all the three cases is the first April of the year in which the rolls are prepared. The election to the Council will be by proportional representation by means of the single transferable vote, (5) The rest (one sixth) are nominated by the Governor or the Rajpramukh from persons who have special knowledge of literature, science or art or practical experience in the cooperative movement or social service.

Allocation of Seats—No Council could have more than one-fourth of the total number of members in the Legislative Assembly or less than 40 members.

ALLOCATION OF SEATS IN THE LEGISLATURE COUNCIL

	Total	*Local bodies*	*Graduates*	*Teachers*	*Assembly*	*Nominated*
Bihar	72	24	6	6	24	12
Bombay	72	24	6	6	24	12
Madras	72	24	6	6	24	12
Punjab	40	13	3	3	13	8
M. P.	72	24	6	6	24	12

West Bengal	51	17	4	4	17	9
Mysore	40	13	3	3	13	8

Legislative Assembly Election

Qualification—any citizen of India who is not less than 25 years of age and is not specifically disqualified can stand for election.

Voters—The whole adult body of electors will vote in the state.

No. of members—for Part A and B States, no Assembly can have more than 500 members or less than 60.

ALLOCATION OF SEATS IN THE LEGISLATIVE ASSEMBLIES

Part A States

	Total	*General*	*Scheduled Castes*	*Scheduled Tribes*
Assam	108	77	5	26
Bihar	330	252	44	34
Bombay	315	259	27	29
M. P.	232	173	32	27
Madras	375	309	62	4
Orissa	140	91	21	28
Punjab	126	105	21	—
U. P.	430	347	83	—
West Bengal	238	186	39	13

Part B States

	Total	*General*	*Scheduled Castes*	*Scheduled Tribes*
Hyderabad	175	142	31	2
Madhya Bharat	99	70	17	12
Mysore	99	79	20	—
Pepsu	60	50	10	—
Rajasthan	160	139	17	4
Saurashtra	60	55	4	1
Travancore-Cochin	108	98	10	—

Part C States

	Total	*General*	*Scheduled Castes*	*Scheduled Tribes*
Ajmer	30	24	6	—
Bhopal	30	23	5	2
Coorg	24	18	3	3
Delhi	48	42	6	—
Himachal Pradesh	36	28	8	—
Vindya Pradesh	60	48	6	6

TOTAL NO. OF CONSTITUENCIES AND TOTAL NUMBER OF VOTERS FOR STATE ASSEMBLIES

Part A States

	No. of Seats	*Total No. of Voters*	*Total No. of Constituencies*
Assam	108	40,12,067	94
Bihar	330	2,03,89,520	276
Bombay	315	1,67,23,381	268

M. P.	232	1,12,32,070	184
Madras	375	2,70,17,652	309
Orissa	140	76,84,828	107
Punjab	126	66,91,004	105
U. P.	430	3,13,67,000	347
West Bengal	238	1,24,15,107	187
	2,294	13,75,38,629	1,877

Part B States

	No. of Seats	*Total No. of Voters*	*Total No. of Constituencies*
Hyderabad	175	90,42,244	142
Madhya Bharat	99	40,85,594	79
Mysore	99	39,86,005	80
Pepsu	160	17,63,531	140
Rajasthan	60	76,27,152	50
Saurashtra	60	17,57,078	55
Travancore-Cochin	108	42,05,740	97
	761	3,24,67,344	643

Part C States

	No. of Seats	*Total No. of Voters*	*Total No. of Constituencies*
Ajmer	30	3,28,789	24
Bhopal	30	4,07,670	23
Coorg	24	96,831	18
Delhi	48	7,37,927	42
Himachal Pradesh	36	5,21,428	28
Kutch	30	2,88,344	30
Manipur	30	3,04,921	30
Tripura	30	3,24,838	30
Vindhya Pradesh	60	17,60,926	48
	318	47,71,674	273
Grand Total	3,373	17,47,77,647	2,793

POLITICAL PARTIES AND ELECTION SYMBOLS

Symbols for 14 All-India Parties

Indian National Congress	Two bulls with yoke on
Socialist Party of India	Tree
All India Forward Block (Marxist)	Standing Lion
All India Forward Block (Subhasist)	Human Hand
Hindu Mahasabha	Horse and Rider
K. M. P. P.	Hut
Ram Rajya Parishad	Rising Sun
A. I. Scheduled Castes Federation	Elephant
Communist Party of India	Ears of Corn and a Sickle
Krishikar-Lok Party	A cultivator winnowing grain
Bharatiya Jan Sangh	Lamp
Revolutionary Socialist Party	Spade and Stoker
Revolutionary Communist Party of India	Flaming Torch
Bolshevik Party of India	Star

SEATS RESERVED FOR SCHEDULED CASTES AND SCHEDULED TRIBES

Part A States

	Scheduled Castes		Scheduled Tribes	
	Parliament	Legislative Assemblies	Parliament	Legislative Assemblies
Assam	1	5	2*	26†
Bihar	7	44	6	35
Bombay	4	27	4	29
M. P.	4	32	3	27
Madras	12	62	1	4
Orissa	3	21	4	28
Punjab	3	21	—	—
U. P.	17	83	—	—
West Bengal	6	40	2	12
	57	335	22	161

Part B States

Hyderabad	4	31	—	2
M. P.	2	17	1	12
Mysore	2	19	—	—
Pepsu	1	10	—	—
Rajasthan	2	16	1	5
Saurashtra	—	4	—	1
Travancore-Cochin	1	11	—	—
	12	108	2	20

Part C States

	Scheduled Castes		Scheduled Stribes	
	Parliament	State Assemblies	Parliament	State Assemblies
Ajmer	—	6	—	—
Bhopal	—	5	—	2
Croog	—	3	—	3
Delhi	1	6	—	—
Himachal Pradesh	1	8	—	—
Kutch	—	—	—	—
Manipur	—	—	1	—
Tripura	—	—	—	—
Vindhya Pradesh	1	6	1	6
	3	34	2	11
Grand Total	72	477	26	192

---

* One seat reserved for the Scheduled Tribes in the Autonomous Districts.

† 17 seats reserved for the Scheduled Tribes in the Autonomous Districts.

THE 1952 GENRAL ELECTIONS

Number of Election Candidates throughout India—After the withdrawal of nominations, the number of valid candidates contesting the election in India in 1952, was estimated at well over 20,000 for 3,862 seats of the House of the People and the State Legislative Assemblies.

The total number of seats in the various Legislatures and Electoral Colleges is 4,505 distributed as under—

House of the People	497
Council of States	216
Legislative Assemblies	3,283
Legislative Councils	419
Electoral Colleges	90

Of these 4,505 total seats, 93 are nominated seats including 8 nominated saets for the House of the People and 85 nominated seats for the Council of States and Legislative Councils. Excluding the nominated seats, the total number of elected seats for Central and State Legislatures including Upper Houses is 4,412.

Number of Elected Seats.

The total number of elected seats in the House of the People and the State Legislative Assemblies and Electoral Colleges for which elections are now being held to is 3,862.

Number of Constituencies

Total number of constituencies for the seats (3,862) is 3,194 including 401 constituencies for the House of the People and 2,793 constituencies for the State Assemblies.

PRINCIPAL ELECTION MANIFESTOS

SOCIALIST PARTY OF INDIA

(1) *Food and Agriculture*—(a) Abolition of Zemindari without compensation. The maximum holding per farming family will be 30 acres of average productivity.

(2) *Industry*—(a) Certain industries will be taken over by the State. Nationalisation of banks and insurance companies will help capital formation. Social ownership of key industries like iron and steel, power, mines, chemical, fertilisers and plantation is essential for planned economic development, rest of the industries will be in private hands.

(3) *Trade and Controls* : There shall be State Trading Corporations which will import and procure all requirements of the nationalised sector and scarce capital goods and industrial raw materials. All products of nationalised industry will be exported and distributed on a whole sale basis.

(4) *Public Finance*: Public revenues will be so distributed as to leave increasing resources to the organs of administration closest to the people. Public expenditure will seek to augment production and not maintain merely law and order.

(5) *Economic equality*: The State will abolish all privileges of princes and taxation measures and a graduated capital levy will be used to curtail the concentration of property and to bring all incomes within the range of a floor of Rs. 100 to a ceiling Rs. 1,000.

(6) *Social Mobility*: All barriers of caste shall be pulled down.

(7) *Women*: All disabilities on women will be removed. They shall get equal pay for equal work.

(8) *Minorities*: Minorities will have right to profess and practise their religion etc.

(9) *Refugees*: Refugee agriculturists will be settled in cooperative land reclamation schemes.

(10) *Changes in the Constitution*: (a) expanding the sphere of people's freedom (b) provinces to be re-arranged on a linguistic basis. (c) All States to be brought on equal status (d) restricting the property rights.

(11) *Commonwealth*: India shall withdraw from the British Commonwealth.

(12) *Administrative Reforms*: (a) Justice will be cheap (b) anti-corruption measures (c) Public opinion to be associated with each level of executive (d) Talents will be offered opportunity of special training.

(13) *Foreign Policy*: (a) Collective Security arrangements for the belt stretching from Indonesia to Egypt (b) abstention from disputes between Atlantic and Soviet Camps, etc. (4) Opposition to all charters and agreements that bolster the international caste system.

COMMUNIST PARTY OF INDIA

The Government would be a government of "democratic parties, groups and individuals, representing workers, peasants, the middle classes and national capitalists who stand for genuine industrialisation and for freedom and independence of India". Some of the 15 points Programmes—

(1) Sever India's connection with Commonwealth, (2) cancel peasants' debts, abolish landlordism without compensation, (3) develop industries with the aid of nationalised capital, (4) grant living wages to workers and employees, (5) create national army closely linked with people, (6) abolish police force and form national militia, (7) establish full civil liberties and freedom of speech, press and assembly, (8) redistribute boundaries between States to form units mainly on a linguistic basis, (9) protect right of minorities etc., penalise incitement to communal hatred, (10) Eliminate social and economic disabilities from which women suffer, pay them equal wages with men for equal work, (11) Introduce free compulsory primary education, (12) Establish people's health services and medical centres (13) Provide land, implements and employment for refugees, (14) Establish trade and economic relations with all countries based on equality and mutual benefit (15) Fight for a pact of peace between the great powers, prohibition of atom bomb, progressive disarmament and withdrawal of foreign troops from all countries (16) Establish a pact of friendship and alliance with Pakistan, Ceylon and Nepal.

INDIAN NATIONAL CONGRESS

The establishment in India, by peaceful and legitimate means of a Cooperative Commonwealth based on equality of opportunity and of political, economic and social rights and aiming at world peace and fellowship.

(2) The abolition of Zemindari, Jagirdari and the like must be rapidly completed. Security of tenure and fair rents should be assured to tenants and tillers of the soil.

(3) Cooperative farming with the objective of making the whole or a substantial part of a village, a unit of cooperative management for increased agricultural production.

(4) Condition of agricultural labour should be improved specially in the lower wage pockets.

(5) Increasing attention should be paid to the preservation of milch and draught cattles, upgrading of cattle breeds for supply of milk and improvement of agriculture.

(6) Policy of *laissez-faire* is now impossible in industry. The basic industries should be owned and controlled by the State, leaving some fields for private enterprise.

(7) Economic equality and social justice must proceed side by side with economic progress.

(8) Principle of basic education *i.e.* learning through a craft should be utilised to the largest possible extent.

(9) Economic and cultural aduancement of Scheduled Castes and Tribes and other backward classes.

(10) Differences between Part A States and other States should largely disappear.

(11) Priority and full attention of rehabilitation of displaced persons from Pakistan.

(12) As a secular State, every citizen must have the same duties, rights, privileges and obligation as any other. The State must protect these rights of all minority communities in the country.

(13) Women's disabilities should be removed.

(14) Congress favours the redistribution of provinces where such a demand represents the agreed views of the people concerned.

(15) Independent line as regards foreign policy in her own natinoal interest and in the interest of world peace with friendly relations with all countries.

ALL-INDIA SCHEDULED CASTES' FEDERATION

(1) The Federation charged the Government of India with championing Communist China's case for admission to the U.N. at the expense of India's own interests. "This has been responsible for the prevailing antagonism between India and America".

(2) Federation advocated the partition of Kashmir—predominantly Muslim areas to go to Pakistan, subject to the wishes of the Kashmiris living in the valley, and non-Muslim areas consisting of Jammu and Ladak to come to India.

(3) Federation stated the remedy for poverty lay in more production of industry and not the pattern of industry.

(14) Where national undertaking of an industry was possible and essential, the Federation would support it. "Where private enterprise is possible and national undertaking not essential, private enterprise will be allowed."

The Association's seven point charter of principles—

1. It will treat all Indians not only as being equal before the law but as being entitled to equality, and will accordingly foster equality where it does not exist and uphold it where it is denied.

2. It will regard every Indian as an end in himself with a right to his own development in his own way and the State as only a means to that end.

3. It will sustain the right of every Indian to freedom—religious, economic and political—subject to such limitations as may arise out of the need for the protection of the interests of other Indians or the State.

4. It will uphold the right of every Indian to equality of opportunity subject to the provision that those who had none in the past shall have priority over those who did.

5. It will keep the State ever aware of its obligation to make every Indian free from want and free from fear.

6. It will insist on the maintenance of liberty, equality and fraternity and will strive for redemption from oppression and exploitation of man by man, of class by class, and of nation by nation.

7. It will stand for the parliamentary system of Government as being the best form of Government both in the public and the individual interest.

JAN SANGH

The party stands for public ownership of industries, especially those catering to essential defence needs. As for other large industries, State ownership had generally not worked efficiently and economically in this country. Unlimited State capitalism might also lead to totalitarianism. The party would, therefore, encourage private enterprise to expand industry under the general control and regulation of the State in the interests of consumers and producers alike. Effective steps should be taken to put a check on profiteering and concentration of economic power in the hands of "the big few" through cartels and combines.

The party stands for progressive rationalization and decentralization of industry.

It believes in equal rights of all citizens of India irrespective of caste, creed or community. Minorities and majorities based on religion will not be recognized by the party. Special steps will be taken to promote the educational and economic advancement of backward sections of the people.

The party is pledged to the prohibition of cow slaughter. It will also work for the early adoption of Hindi as an all-India language together with full encouragement to other Indian languages, and take special steps for promoting the study of Sanskrit.

Other items in the programme includes military training to young men and women on a nation-wide scale.

HOUSE OF THE PEOPLE

Final Position of Some States upto 31-1-52

	No. of Seats	*Congress*	*Socialists*	*K.M.P.P.*	*Jan Sangh*	*H. Mahasabha*	*Sch. Caste Fed.*	*Communists & Leftists*	*Independents*	*Others*	*Total*
Delhi	4	3	..	1	..	..	..	..	..	..	4
Bombay	45	40	..	..	..	..	1	..	3	1	45
Himachal Pradesh	3	3	..	..	..	..	..	..	..	..	3
Travancore-Cochin	12	6	..	..	..	..	..	4	1	1	12
Kutch	2	2	..	..	..	..	..	..	..	..	2
Ajmer	2	2	..	..	..	..	..	..	..	..	2
Saurashtra	6	6	..	..	..	..	..	..	..	..	6
Hyderabad	25	14	1	..	..	..	1	7	1	1	25

STATE ASSEMBLIES

Final Position of Some of the States upto 31-1-52

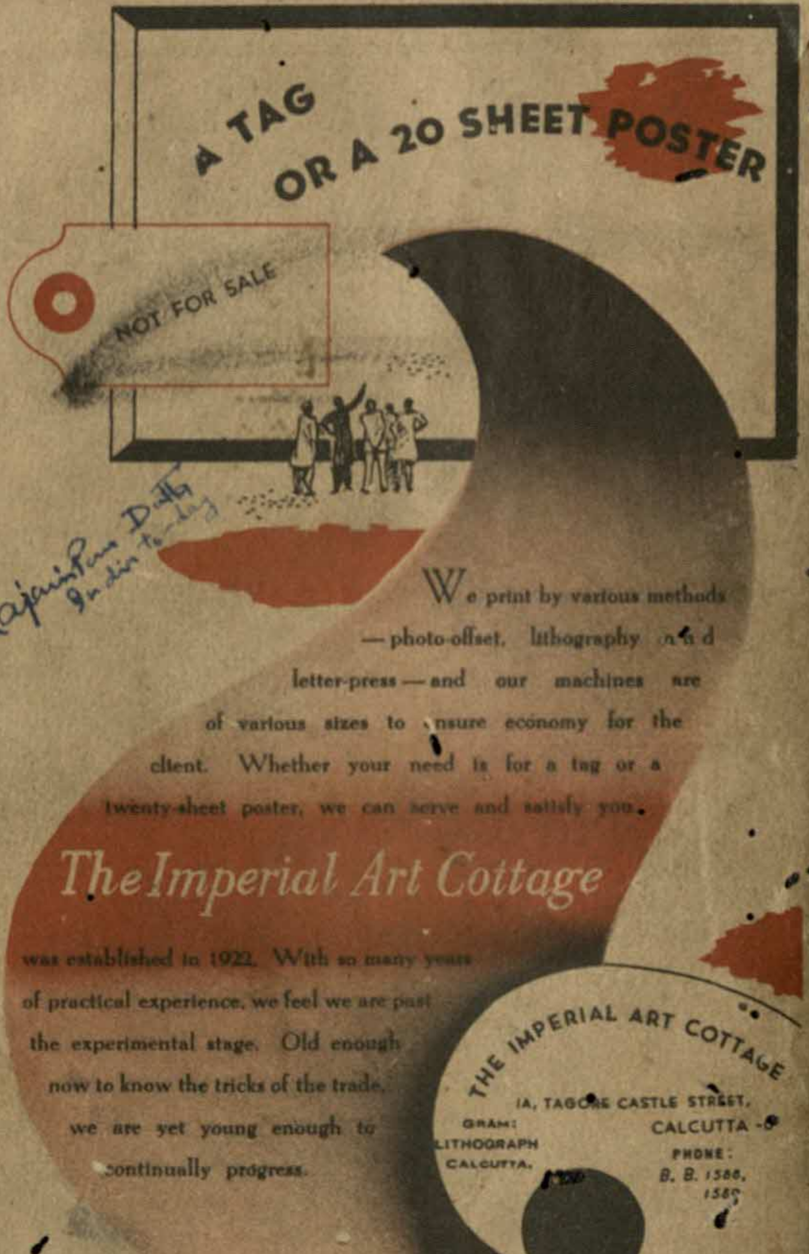
	No. of Seats	*Congress*	*Socialists*	*K. M. P. P.*	*Jan Sangh*	*H. Mahasabha*	*Sch. Caste Fed.*	*Communists & Leftists*	*Independents*	*Others*	*Total*
Delhi ..	48	39	2	..	4	1	..	..	2	..	48
Bombay ..	315*	269	8	..	..	..	1	1	17	18	314
Travancore-Cochin ..	108	44	12	..	..	..	..	32	11	9	108
Himachal Pradesh ..	36	24	..	3	1	..	1	..	7	..	36
Coorg ..	24	15	..	..	..	..	..	..	..	9	24
Hyderabad ..	175	93	11	..	..	..	5	42	14	10	175
Saurashtra ..	60	55	2	..	..	..	..	..	2	1	60
Ajmer ..	30	20	..	..	3	..	..	..	4	3†	30
Electoral Colleges Kutch ..	30	28	..	..	..	..	..	..	1	1	30

---

* Election of one constituency postponed due to the death of a candidate after filing his nomination paper.

† Pursharthy Panchayat.

S.C.E.R.T. West Bengal
Library
Calcutta
25/3, B. T. Road



Rajani Palme Dutt
India to-day

We print by various methods—photo-offset, lithography and letter-press—and our machines are of various sizes to ensure economy for the client. Whether your need is for a tag or a twenty-sheet poster, we can serve and satisfy you.

The Imperial Art Cottage

was established in 1922. With so many years of practical experience, we feel we are past the experimental stage. Old enough now to know the tricks of the trade, we are yet young enough to continually progress.

THE IMPERIAL ART COTTAGE

1A, TAGORE CASTLE STREET,
CALCUTTA-6

GRAM:
LITHOGRAPH
CALCUTTA.

PHONE:
B. B. 1588,
1589